

JPRS 77560

11 March 1981

East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2105

FBIS

FOREIGN BROADCAST INFORMATION SERVICE

NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semi-monthly by the National Technical Information Service, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Indexes to this report (by keyword, author, personal names, title and series) are available from Bell & Howell, Old Mansfield Road, Wooster, Ohio 44691.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

11 March 1981

EAST EUROPE REPORT

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2105

CONTENTS

ALBANIA

Briefs

Trade Network Extended	1
New Foreign Trade Magazine	1

CZECHOSLOVAKIA

Atomic Energy Commission Chairman Looks at Next Decade (Jan Neumann; HOSPODARSKE NOVINY, 5 Dec 80)	2
National Economic Results for 1980 Announced (RUDE PRAVO, 23 Jan 81)	17
CSSR Standard of Living Examined (DOKUMENTACNI PREHLED, 7 Jan 81)	30
Investment Trends in CSSR Food Industry (Stefan Studeny; REVUE OBCHODU, PRUMYSLU, HOSPODARSTVI, Dec 80)	35
SSR Pesticide Production Problems, Shortages Revealed (Ivan Spani, Milan Valasek; PRACA, 14 Jan 81)	41

GERMAN DEMOCRATIC REPUBLIC

West German Analysis of Investments Vs Subsidies in GDR Budget (Maria Elisabeth Ruban, Heinz Vortmann; DIW-WOCHENBERICHT, 14 Aug 80)	46
Crop, Weather Report Published for December 1980 (D. Krumbiegel; FELDWIRTSCHAFT, Feb 81)	54

HUNGARY

Prosperous TSZs Reveal Plans for Coming Year (Tamas D. Horvath; FIGYELO, 31 Dec 80)	57
--	----

POLAND

Ota Sik, 'Prague Spring' Economist, Views Polish Situation (Ota Sik Interview; VORWAERTS, 15 Jan 81)	60
Economic Reform Faces Difficult, Unique Conditions (Stefan Jedrychowski Interview; DZIENNIK LUDOWY, 29 Dec 80)	65
Society Researcher 'Karol K' Doubts Reform Project Success (Vibeke Sperling; INFORMATION, 17-18 Jan 81)	71
Advisability of Moratorium on Credit Payment Debated (ZYCIE WARSZAWY, 1 Jan 81)	78
Opposition to Moratorium, Bohdan Kosinski Interview Comment by Moratorium Backer, by Stefan Bratkowski	
Electric Power Development Problems Described (Marek Jaczewski; GOSPODARKA PLANOWA, Nov 80)	84
Long-Term, Complex Measures Required To Improve Meat Supply (Editorial; GOSPODARKA MIESNA, Nov 80)	94

ROMANIA

Successes, Prospects in Industrial Construction Sector (Dumitru Popa Interview; ROMANIA LIBERA, 27, 29 Dec 80) .	102
Principal Tasks of Mining Industry (Virgil Trofin Interview; SCINTELA, 15 Jan 81)	111

YUGOSLAVIA

Briefs	
Reduced Sugar Production	116
Spring Planting	116
Montenegrin Planting Plan	116
Croatian Oil Gas Needs	116
Vojvodina Farmer Pensions	117
Planting in Slovenia	117
Ports of Rijeka Area	117

ALBANIA

BRIEFS

TRADE NETWORK EXTENDED--Tirana 18 Feb (ATA)--As one of the main branches of the socialist economy in Albania, the trade has played and plays an important role for the continuous increase of the material and cultural well-being of the working people. An important testimony to the development of trade is also its extension in all the corners of the country. Thus, the trade network is today over 2.2 times greater than 20 years ago. Numerous trade units function in the country-side, hence there is more than one such unit in every village. This vast expansion of the trade units also reflects the increase of the goods circulation from year to year. In the year 1970 as against the year 1950 the circulation of the retail sale consumer goods was 6.5 times greater, while in 1980 it was 10.2 times greater. Characteristic of the trade in Albania is the all-round growth of sales, sometimes greater than the population growth. Thus, in 1979 as against 1960, the population increased 60 percent, while the circulation of food and industrial articles increased 2.4-2.6 times for the same period of time. [Text] [AU181207 Tirana ATA in English 0900 GMT 18 Feb 81]

NEW FOREIGN TRADE MAGAZINE--Beginning with January this year, the newspaper ALBANIAN FOREIGN TRADE appears in the form of a magazine. This organ of the Chamber of Commerce of the People's Socialist Republic of Albania will be published bimonthly in English and French. [Tirana ATA in English 1800 GMT 14 Feb 81]

CSO: 2020

ATOMIC ENERGY COMMISSION CHAIRMAN LOOKS AT NEXT DECADE

Prague HOSPODARSKE NOVINY in Czech 5 Dec 80 pp 8-9

[Article by Engr Jan Neumann, Candidate for Doctor of Science, chairman of the Czechoslovak Atomic Energy Commission: "A Program for the Coming Decade; On the Problems of Guaranteeing the Energy Efficient Development of Production in the CSSR in the Eighties"]

[Text] Ever more expensive energy resources have already become a part of economic reality to which the economies of individual countries must adapt. The adaptation process in Czechoslovakia took place relatively satisfactorily until 1975; but several unique conditions were in effect here which helped to lower the energy intensiveness of production. The complexity of these problems has increased, and they have grown in number. For just this reason there has been a change in the approach to this area. The state target program for the rationalization of consumption, conservation, and utilization of fuel and energy has determined the main directions and fundamental objectives of a further decrease in energy consumption for the coming decade. This article provides an introduction to the principles of this program.

The economic development of the major industrial countries after World War II was based on a sharp increase in the consumption of crude oil and natural gas, which until 1970 were among the most easily acquired and cheapest sources of energy. While the CEMA member countries have developed their own sources of energy and are, as a unit, not dependent on energy imports (above all thanks to the rapid development of crude oil and natural gas extraction in the USSR), the economically advanced capitalist countries have become ever more dependent on imports of crude oil and natural gas from the countries of the Near East, Africa, and South America.

Energy Price Explosion

The countries which produce and export crude oil have formed the organization called OPEC which, despite numerous internal disagreements, controls to a large extent the growth of the price of crude oil. At the end of the 1960s the world price of crude oil was at a level of \$1.5 to \$2 per barrel, i.e. \$10 to \$14 per ton. The current price (October 1980), f.o.b. Persian Gulf, ranges from \$30 to \$36 per barrel, or \$220 to \$260 per ton. One must then add to this price the costs of transport by tanker and/or pipeline which amount to 10 to 15 percent of

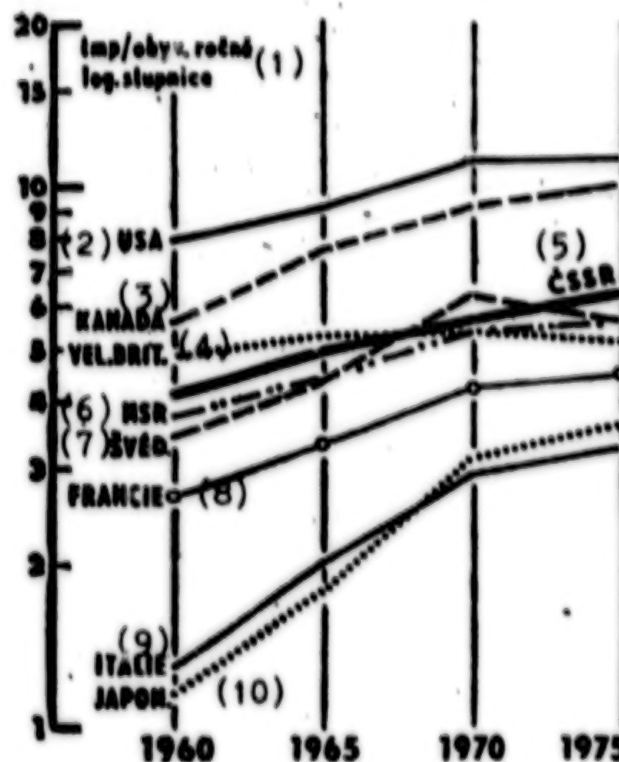
the price of the transported oil. This increase in the price of crude oil and energy-related raw materials is one of the main causes of the so-called energy crisis and inflation in the economically developed capitalist countries.

An increase in the prices of crude oil and natural gas is logical, and to a certain sensible extent even justified, when we consider that supplies of these raw materials are limited. World supplies of crude oil and natural gas are significantly lower than supplies of coal and uranium (when converted to units of standard fuel). And even though one may expect that additional deposits of crude oil and natural gas will be discovered, their extraction will be ever more costly and it is therefore not possible to expect a change in the trend of their prices. Therefore the major energy sources from now until early in the 21st century will be coal and uranium, and to a lesser extent water. Coal supplies are, however, distributed very unevenly: 90 percent of world coal reserves are concentrated in three large countries--the USSR, the United States and China.

The economic development of every country is necessarily tied to the development of its energy base. From 1955 to 1970 it was necessary to assure a 0.8 to 1.5 percent yearly increase in primary energy resources in order to achieve a 1 percent yearly growth in national income. If the ratio of yearly increases in consumption of primary energy resources to yearly increases in national income remains, during future development, at a value of approximately 1, then by the year 2000 world energy consumption, assuming an average 3 percent growth in national income, will have grown to about 20 billion tons of standard fuel, and to about 25 billion tons of standard fuel given an average yearly increase in national income of 4 percent.

As studies presented at the 1977 World Energy Conference show, world reserves of traditional resources, especially nuclear resources, are adequate, but it is not feasible to acquire enough investment resources so that their extraction will reach the level cited above. Between 1970 and 1975, the sharp increase in the prices of energy-related raw materials led to the institution by many economically advanced countries with a high average consumption of primary energy resources (expressed by the indicator "tons of standard fuel consumed per inhabitant per year") of extensive measures leading to intensive conservation of fuel and energy in all sectors of their national economies.

Figure 1. Development of Average Consumption of Primary Energy Sources



Key:

- | | |
|---|----------------------------|
| 1. Tons of standard fuel per inhabitant per year; logarithmic scale | 5. Czechoslovakia |
| 2. USA | 6. German Federal Republic |
| 3. Canada | 7. Sweden |
| 4. Great Britain | 8. France |
| | 9. Italy |
| | 10. Japan |

The economically developed nonsocialist countries are presently trying, by means of various conservation measures, to lower the rate of increase of consumption of primary energy resources and, in particular to reduce their dependence on imported crude oil. The CEMA member countries have embarked on the development of long term target programs for cooperation, the first of which has been defined as the development of energy and raw material resources. In the energy field, the following main directions have been outlined:

—Striving by each member state to develop optimally its own primary energy resources;

—The cooperative construction of crude oil and natural gas pipelines to guarantee deliveries from the Soviet Union of the justified requirements for oil and natural gas of the member states;

--The construction of a unified electrical energy system for the member states based upon gigantic energy centers connected by very high tension networks;

--Further progress on the construction of nuclear power plants in all member countries according to the common program elaborated as far as 1990, and the production of the equipment for these power plants on the basis of valid agreements on specialization and cooperation;

--Focusing of the efforts of science and technology on a search for new energy resources and on reducing the energy intensiveness of all sectors of the national economy;

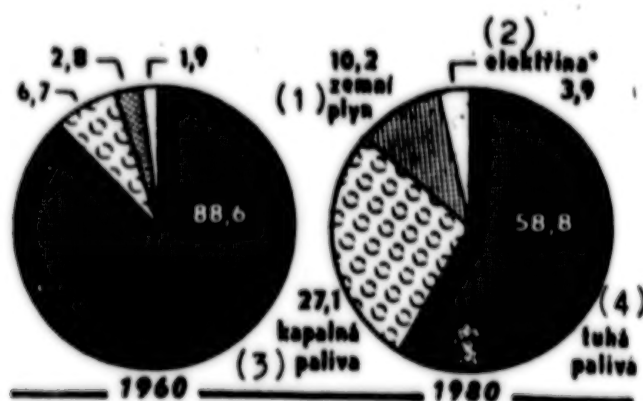
--Building of products requiring large inputs of energy cooperatively in optimal facilities close to ample energy resources.

The development of world energy resources is becoming one of the fundamental global problems for humanity. Therefore, the countries of the socialist community have justifiably proposed that long term solutions to energy problems be included in programs of international cooperation under the auspices of the United Nations and regional organizations.

Energy Intensiveness of the Czechoslovak Economy

The energy intensiveness of our national economy has been declining since 1965. However, during this period Czechoslovakia has also utilized cheap crude oil and natural gas to a growing extent. The share of these enriched energy raw materials in the overall Czechoslovak fuel and energy balance increased from 9.5 percent in 1960 to 30 percent in 1975, and should reach 37 percent by 1980. (See Figure 2)

Figure 2. Structure of Czechoslovak Primary Energy Resources (in percent) in 1960 and in 1980 (expected)

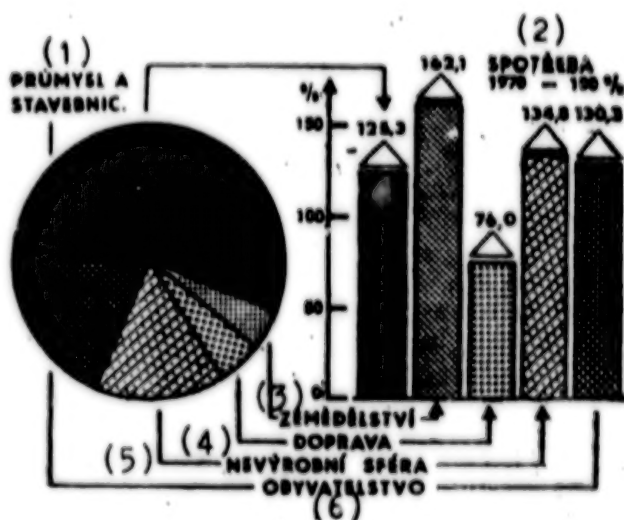


Key:

- | | |
|--|-----------------|
| 1. Natural gas | 3. Liquid fuels |
| 2. Electricity: water, nuclear, and excess of imports over exports | 4. Solid fuels |

Czechoslovakia's average consumption of primary energy resources (about 6.7 tons of standard fuel per inhabitant in 1980) places it among the most economically advanced countries in the world and even placed it in second place in Europe in 1980. However, the creation of national income per inhabitant does not correspond to this high average consumption: in comparison with the industrially advanced countries of Europe, our average consumption of energy resources is 20 to 30 percent higher per given amount of gross national product.

Figure 3. Structure of energy consumption in 1978 (preliminary data), and its growth in specific sectors of the Czechoslovak national economy in comparison with 1970



Key:

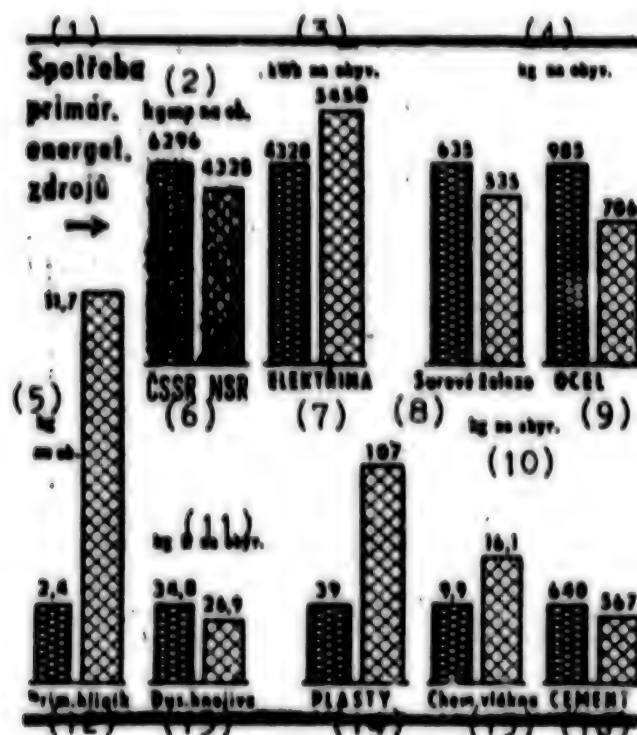
- | | |
|-----------------------------------|-------------------------|
| 1. Industry and construction | 4. Transportation |
| 2. Consumption (1970=100 percent) | 5. Nonproduction sphere |
| 3. Agriculture | 6. Population |

The major causes of the high energy intensiveness of the Czechoslovak national economy are:

--The high percentage of solid fuel in the Czechoslovak energy balance, especially of low temperature brown coal with a high water and ash content.

--The high level of production of energy intensive industrial products. For instance, the FRG, with a lower consumption of primary energy resources per inhabitant per year, produces fewer of the traditional energy intensive products (pig iron, steel, cement), but significantly more modern, just as energy intensive products (aluminum, plastics, synthetic fibers) which, however, may be more efficiently utilized.

Figure 4. Comparison of energy intensive products of CSSR and Federal Republic of Germany in 1976 (CSSR=100 percent); consumption of primary energy resources in CSSR and Federal Republic of Germany in 1975



Key:

- | | |
|--|--|
| 1. Consumption of primary energy resources | 8. Pig iron |
| 2. Kilograms standard fuel per inhabitant | 9. Steel |
| 3. Kilowatt hours per inhabitant | 10. Kilograms per inhabitant |
| 4. Kilograms per inhabitant | 11. Kilograms of nitrogen per inhabitant |
| 5. Kilograms per inhabitant | 12. Primary aluminum |
| 6. CSSR; Federal Republic of Germany | 13. Nitrogen fertilizer |
| 7. Electricity | 14. Plastics |
| | 15. Man-made fibers |
| | 16. Cement |

--The structure of machinery production, the major programs of which are highly material and energy intensive (for instance metal rolling and energy equipment, heavy chemical machinery, the production of heavy trucks and tractors, the production of heavy metal turning and forming machines, and the like). The share of electronics, heavy-current semiconductor equipment, measuring, regulating and automating technology is still small, and to a large extent even the technical level of these products is obsolescent.

--The low energy efficiency of several obsolete fixed assets (the boiler stock in the industrial and communal areas, furnaces in the metallurgy, machinery, and ceramics industries, outmoded steam power plants, electric drives on mining machinery, metal rolling equipment, paper-making machinery, and the like).

--The structure of foreign trade, in which there is a large percentage of exported goods with a high energy content, a low per kilogram price and a small percentage of highly qualified labor input (for instance, rolled steel products).

--An insufficient level of management of the national energy policy; the wasting of fuel in industry, agriculture, transportation, construction, and in joint apartment management.

The wholesale prices valid to the end of 1978, and the prices announced for industrial consumption beginning in 1979, appear low because they were based on the previously low prices of imported crude oil and natural gas and on production calculations which failed to take into account the total social costs of, for instance coal mining, coke production, or electricity generation. The Institute for the Development of the Fuel and Energy Base, in cooperation with the electrotechnical faculty of the Czech Institute of Technology in Prague calculated, as of the end of 1978, the total social costs of the basic types of fuel and energy. The following table shows the results.

Table 1. Wholesale Prices and Costs of Selected Types of Energy--1980

	<u>Social Costs</u> ¹	<u>Average Prices</u> ²
Energy Coal (Kcs per ton)	275	97
Coke (Kcs per ton)	973	598
Heavy Heating Oil (Kcs per ton) ³	3,760	1,020-1,090
Light Heating Oil (Kcs per ton) ³	3,880	1,100-1,160
Natural Gas (Kcs per 1,000 cubic meters)	1,900	830
Electrical Energy (Kcs per megawatt hour)		
--very high tension	863	254
--high tension	943	360
--low tension	1,115	458

Source: author's calculations

Notes: 1. Overall social costs of acquisition

2. Average wholesale prices

3. Price moves according to type within these boundaries

These total social costs of energy acquisition continue to increase; wholesale prices follow this trend, even though they are below costs.

At the same time, average investment costs for coal mine construction, including all related investments, are very high--Kcs 727 per ton of brown energy coal, or Kcs 1,310 per ton of standard fuel. The average investment costs for the construction of coal-fired power plants reach, including related investments, a value of as much as Kcs 12,000 per installed kilowatt hour of capacity.

Development Potential

Over the long term, even when we count on a decline in the average energy intensiveness of national income produced through the implementation of a conservation program for fuel and energy, it is necessary to provide for the necessary increase

in primary energy resources. The consumption of primary energy resources will reach a level of about 6.7 tons of standard fuel per inhabitant in 1980 in Czechoslovakia; it should increase to 8.0 to 8.5 tons of standard fuel per inhabitant by 1990, and to 9 to 10 tons per inhabitant by the year 2000. These values could be achieved in the future as well, given a yearly increase in the national income on the order of 3.5 to 4 percent, on the assumption, however, that we succeed in maintaining the relation between the yearly increase in primary energy resources and the yearly increase in national income at a value of 0.5 to 0.6. Insuring a constant growth of primary energy resources at a yearly rate of about 2 percent is a very serious and demanding objective for the Czechoslovak national economy. At the same time, oil imports from the Soviet Union will reach 18.8 million tons this year, and we cannot expect a further increase in this amount. Oil imports from other areas will be limited. Extraction on Czechoslovak territory is negligible.

The situation regarding natural gas resources is not much better. Gas imported from the Soviet Union represents, again, a crucial percentage of the natural gas consumed in Czechoslovakia; during the Sixth Five-Year Plan the Soviet Union has delivered about 30 billion cubic meters to Czechoslovakia, and during the Seventh Five-Year Plan (1981-1985) it will deliver about 42 billion cubic meters.

Brown coal represents the largest percentage of domestic energy resources in Czechoslovakia. The extraction of brown coal reached a level of 92 million tons in 1978, and by 1990 it is to be increased to 110 million tons per year, which will be the largest amount possible, given known geological reserves, until the year 2000. The principal mining center is the North Bohemian Brown Coal Region. Mining in this region will be increasingly complicated and costly, because the coal deposits descend to a depth of 300 to 400 meters, which means 3 to 5 cubic meters of overburden will have to be removed per ton of mined coal. The key issue in the planned development of this region is the supply of technological units for overburden removal and mining, which are composed of digging wheel and bucket loader excavators, conveyor belt transport systems and overburden dumping machines.

The mining of black coal, which stands now at a level of about 28 million tons per year, will remain at this level until the end of the century, because we will be mining at ever greater depths and in increasingly complex geological conditions.

About a third of the hydropower potential of our rivers has been developed, and a majority of the efficient, flow through power plants on the Vltava and the Vah rivers have been built. We still have to finish the Danube water works, in cooperation with Austria and Hungary. The construction or rebuilding of small water works on the upper reaches of rivers or on smaller streams is being planned. However, the percentage of hydropower will remain at about 1.5 to 2 percent of the total primary energy resources.

All these, and other, traditional primary energy resources, both domestic and imported, will not suffice to cover the projected energy consumption in 1990, and even less by 2000. We must, therefore, search for additional new resources. Under our conditions, it is possible to develop solar, geothermal, and above all

nuclear energy. Nuclear energy is the single existing new energy source which will significantly contribute to the coverage of the increasing consumption of primary energy resources in Czechoslovakia late in the 20th, and at the beginning of the 21st century.

The construction of nuclear power plants in Czechoslovakia is progressing on the basis of bilateral agreements with the Soviet Union. Power plants are under construction at Jaslovské Bohunice and at Dukovany. Four units will be built at each of these sites with the VVER 440 light water pressure reactor. The overall capacity of these power plants will be about 3,500 megawatts, and they are to become operational gradually until 1985. During the 1986-1990 Five-Year Plan an additional nuclear power plant with 4 VVER 440 units will be built at Mochovce (Levice district). Further construction of nuclear power plants in Czechoslovakia will progress based on the newly designed VVER 1000 light water pressurized reactor.

Unique Conditions

To date the Czechoslovak national economy has been inordinately consumptive of primary energy resources. Further expansion of the energy base will be more and more costly in both investment and foreign currency terms. It is therefore necessary to devote significant efforts to the conservation of fuel and energy, and to search for other ways to lower the average energy consumption per given level of national income.

In 1972 the CSSR Government approved a state program for rationalization of the management of fuel and energy resources which decreed that 10 crucial sectors must achieve savings of 4.6 million tons of standard fuel from 1972 to 1975. An examination of yearly plans showed that by 1975 savings of 6.4 million tons of standard fuel had been achieved. The energy intensiveness of the sectors in question (excluding the Federal Ministry of Transportation) had decreased in 1975 by 16 percent in comparison with 1970. This outcome was, however, due to a large extent to the elimination of the low temperature carbonization of brown coal, and its replacement by the gasification of petroleum residue at the Zluzi chemical factories of Czechoslovak Petroleum, and the rapid replacement of steam engines by electric and diesel engines in railroad transport. The increased use of liquid and gaseous fuels for technical purposes and in boilers also played a positive role at this time.

On the basis of a decree by the 15th CPCZ Congress, which ordered a 2 to 2.5 percent yearly decrease in industrial consumption of fuel and energy between 1976 and 1980, a new state program was developed for the rationalization of fuel and energy consumption during the Sixth Five-Year Plan which differed in extent and conception from the program of the Fifth Five-Year Plan. The new state program included the joint apartment sector consumption of fuel and energy, in addition to innovations of a higher order, all aimed at the modernization or expansion of production while simultaneously saving significant amounts of fuel and energy. This new state program was approved by the CSSR Government in 1976, and the government decreed that 10 critical sectors achieve savings during the Sixth Five-Year Plan of 10.4 million tons of standard fuel (by 1980). This corresponds to an

average yearly saving of 2.3 percent. The predominant share of these savings (almost 85 percent of the total) fell to the Federal Ministries of Fuel and Energy, Metallurgy and Heavy Machine Building, and General Machine Building, and on the Czechoslovak and Slovak Ministries of Industry.

While an examination of yearly plan fulfillment in the first years of the Sixth Five-Year plan indicated that these sectors had met their specified targets for fuel and energy conservation, an inspection by the CSSR People's Inspection Committee in the first half of 1977 uncovered a number of shortcomings, especially in the implementation of specific projects which had been incorporated into the state program. The main cause of the delay of these projects was the insufficient assurance of supplier facilities and investment resources. There has been a delay in the application of heavy current, semiconductor technology in transportation and industrial drives primarily as a consequence of inadequate production facilities at Ceskomoravska-Kolben-Danek Semiconductors in Prague. Color television innovation (i.e. their complete transistorization) is behind schedule because of delays in the construction of the necessary component base at the Prague Tesla economic production unit. There is a shortage of insulation materials for the improvement of the insulating properties of building exteriors because the relevant investment projects were not included in the construction plans of the ministries of construction and industry of either republic. Insufficient capacity has been provided for the production of measurement and regulation technology for the heating and exchanger stations of the joint apartment sector, which was to have been provided by Automation and Computer Technology factories. The directive to lower heat consumption during electricity production at steam power plants operated by the Federal Ministry of Fuel and Energy has not been executed due to a lack of facilities in the machine building industry for needed repairs and renovation, errors in the design of cooling towers, and shortcomings in the supplying of coal to, and the operational management of the power plants.

The inspection further indicated that the state program covers only a certain part of fuel and energy management and that it is essential to conceive of the management of these resources in a significantly more comprehensive manner.

Projected Savings

It is, then, essential to improve significantly energy management in all sectors of the national economy. The CSSR Government and the CPCZ Central Committee Presidium discussed in 1979 the objective of the long range state target program for the rationalization of consumption, conservation, and utilization of fuels and energy. This objective was approved and became the starting point for the development of a project which is being negotiated with all the responsible sectors and which was submitted again to the CSSR Government and the CPCZ Central Committee Presidium, upon the approval of which it will become a part of the Seventh Five-Year Plan.

The program has been developed so as to assure fuel and energy savings in 1985 amounting to 12.4 million tons of standard fuel in comparison with 1980 levels, given an investment of about Kcs 20 billion and 2 billion in foreign exchange korunas. By 1990 consumption is to be lowered by 27 million tons of standard

fuel in comparison with 1980 levels, given the expenditure of another Rce 17.6 billion of investment. These projections include the effects of the introduction of electronics into the national economy, which is part of a separate state target program and amounts to about 2 million tons of standard fuel.

In addition to this program for the rationalization and utilization of fuel and energy, it is assumed that during the Seventh Five-Year Plan construction will be started on a cracking complex in the CBR and during the Eighth Five-Year Plan in the SSR. These facilities will make possible an increase in the production of fuels while limiting demands for increases in crude oil imports, and will require about Rce 4.6 billion of overall investment outlays. The effect of these investments may be expressed simply as equivalent to yearly savings of at least 1.5 billion foreign exchange korunas worth of imports of liquid fuels.

The coordinator of this state target program is the Federal Ministry of Technological and Investment Development. The program is subdivided into eight separate state target programs.

1. Reducing losses during the enrichment, conversion, and transportation of fuels and energy in the sector managed by the Federal Ministry of Fuel and Energy.

The Federal Ministry of Fuel and Energy is the coordinating agency for this part of the program. It must achieve savings of 1.92 million tons of standard fuel by 1985 and 3.5 million tons by 1990. This program is supposed to:

--Use selected conventional and nuclear condensation power plants to supply industry and the population with heat;

--Improve the operational parameters of coal-fired power plants with 110 and 220 megawatt units, lower average fuel consumption during electricity generation, and increase operational reliability.

2. Lowering the energy-intensiveness of metallurgy.

The Federal Ministry of Metallurgy and Heavy Machinery Building is the coordinating agency. Fuel and energy savings from this part of the program are to reach 1.8 million tons of standard fuel by 1985 and to aim at a target of 2.7 million tons by 1990. The major provision of this program is for a reduction in the rate of increase of steel output in the Seventh and Eighth Five-Year Plans, from 2.3 percent per year in the Sixth Five-Year Plan to 1.26 percent in the Seventh Five-Year Plan, and 0.8 percent in the Eighth Five-Year Plan. This objective can be reached both by reducing steel exports, and by increasing steel usage in machinery production and construction.

Simultaneously, the implementation of concrete fuel and energy conservation measures is being prepared in ferrous metallurgy, specifically the production of an increased percentage of converter steel, an expansion of the volume of continuously cast steel, the development of vacuum steel production, the introduction of automated blast furnace controls, and the construction of bell-less throats during general and medium repairs to blast furnaces. The program assumes the

much more efficient utilization of secondary, waste energy sources such as blast furnace and converter gas, heat from the evaporative cooling of blast furnaces, etc. Fuel and energy conservation in the metallurgy of nonferrous metals will have to be achieved primarily through the production of aluminum by the application of the most modern technology.

3. Rationalization of fuel and energy consumption and utilization in the machine building industry.

The coordinating agencies are the Federal Ministries of Metallurgy and Heavy Machinery Building, General Machinery Building, and the Electrotechnical Industry. Fuel and energy conservation from this aspect of the program is to reach 1.16 million tons of standard fuel by 1985, and aim at a target of 2.3 million tons by 1990. A higher utilization of fuel and energy in machinery production must accompany a higher valuation of component materials, in accordance with the state target program, "The Rationalization and More Economic Utilization of Metals." In this way the needed reduction in the growth rate of steel production will be achieved as well.

Machinery building is the largest industrial sector in Czechoslovakia, the output of which amounts to about 30 percent of total industrial production. At the same time its own energy needs amount to not quite 6 percent of the overall consumption of primary energy resources. Its task in the reduction of the energy intensiveness of our national economy lies, above all, in the fact that:

--as a producer of capital equipment it influences the energy intensiveness of all other sectors by the technical sophistication of its products, and that:

--as an important metals processor, it influences fuel and energy consumption in metallurgy by its demand on the supply of metals. The result of successfully meeting this objective ought to be, even in the Seventh Five-Year Plan, a significant increase in kilogram prices, which should also be aided by a change in the structure of machinery production in the direction of fields and products with higher kilogram prices, i.e. composed of a higher percentage of qualified labor and enriched material inputs.

A key role in the efficiency of the production of our machinery industry, in its technical sophistication, material and energy intensiveness, and ability to compete in increasingly competitive international markets must be played, above all, by the development of microelectronics, power electronics, computer technology, measurement, regulation, and automation technology, and a whole group of complementary fields corresponding to the level and trends present in the industrially advanced countries.

4. Rationalization of the consumption and utilization of fuel and energy in the chemical and consumer goods industries.

The coordinating agencies are the Ministries of Industry of the CSR and the SSR. Fuel and energy conservation from this program is to reach 2.15 million tons of standard fuel in 1985 (1.47 million tons by the Czech Ministry of Industry and

0.68 million tons by the Slovak Ministry of Industry), aiming at 5.5 million tons in 1990 (4.0 million tons by the Czech Ministry and 1.5 million tons by the Slovak Ministry).

This reduction in energy intensiveness is to be achieved primarily by developing low tonnage, high quality chemical products. Other measures are focused especially on reducing losses during crude oil processing, on replacing several obsolete technologies, and the modernization of heating equipment in the glass and ceramic industries. There is also the matter in the chemical industry of utilizing secondary energy sources, especially the use of already used oils and waste heat.

5. Rationalization of the consumption and utilization of fuel and energy in agriculture and the foodstuffs industry.

The coordinating agency for this program is the Federal Ministry of Agriculture and Food. Fuel and energy conservation from this program is to reach 0.85 million tons of standard fuel in 1985, aiming at a saving of 1.7 million tons in 1990.

To reduce the energy-intensiveness of agricultural production, the program is focusing on the gradual modernization and improvement of agricultural drying areas, the utilization of waste heat, and the like. A new organization of agricultural transport will also have great significance. During the Seventh Five-Year Plan 10,000 specialized agricultural vehicles outfitted for specific tasks are to be delivered. These vehicles are to take care of 78 percent of the necessary transportation effort. During the Eighth Five-Year Plan the delivery of an additional 10,000 agricultural vehicles and 2,000 trailer units will cover fully 95 percent of the overall transportation needs. This will also lower the demand for tractors, as well as demands on both capital and the labor force. Diesel fuel savings in 1970 (as published) will reach about 250,000 tons of standard fuel.

6. Reducing the energy-intensiveness of transportation.

The Federal Ministry of Transportation is the coordinating agency. Conservation of fuel and energy from this program should reach 0.42 million tons of standard fuel in 1985, aiming at a 1 million-ton saving by 1990. Reducing the energy intensiveness of transportation is to be achieved principally:

--by slowing the growth rate of transportation and lowering transportation distances by optimizing transport routes;

--by reducing average fuel and energy consumption per unit of output of all modes of transport;

--by giving priority in the division of transportation work to modes of transport which are less energy consumptive and to systems which do not use liquid fuels.

7. Rationalization of the consumption and utilization of fuel and energy in the production and application of building materials.

The coordinating agencies are the Ministries of Construction of the Czech and Slovak Socialist Republics. Conservation of fuel and energy from this program is to reach 0.63 million tons of standard fuel in 1985 (0.45 million tons by the Czech Construction Ministry and 0.18 million tons by the Slovak Ministry), aiming at a saving of 1.45 million tons in 1990 (1.0 million tons by the Czech ministry and 0.45 million tons by the Slovak ministry). A lowering of the energy-intensiveness of the production of building materials is to be assured through the introduction of progressive production technologies within a framework of the planned expansion of existing operations and the construction of new factories, the rationalization of the consumption of fuel and energy, and greater utilization of secondary energy resources in the production of building materials. Beginning in 1983 the production of exterior panels with thermal insulation properties corresponding to the new norm will be handled at modernized and rebuilt panel construction facilities.

8. Increasing the efficiency of fuel and energy utilization in the nonproduction sphere and in the operations of regional national committees.

The coordinating agency is the Federal Ministry for Technological and Investment Development. Conservation from this program is to reach 1.89 million tons of standard fuel in 1985 and 4.30 million tons in 1990. The basic goal of this program is that fuel and energy consumption in the nonproduction sphere (including the consumption of the population) should develop at the same rate as the overall domestic consumption of primary energy resources.

The most significant of the measures for slowing the growth of the energy intensiveness of the nonproduction sphere (including consumption of the population) are the plan to reduce heat loss by improving the thermal insulation properties of the exteriors of newly constructed buildings, and heat losses from the heating of existing homes by means of supplementary insulation and weather stripping; the installation of measuring and regulating technology both in newly constructed facilities supplied with heat from a centralized source, and the gradual, supplementary installation of this technology in the already existing housing stock; increasing the efficiency of electrical appliances, and using highly efficient light sources for public lighting.

In the planning of apartment construction one must take into consideration that 50 tons of standard fuel are needed for the construction of a single average apartment unit, including the energy intensiveness of the building materials. It makes sense, therefore, to provide for an increase in the apartment stock not only through new construction, but also by increasing the scope of modernization and renovation of the existing stock of housing to a level of 50,000 to 70,000 apartments per year. Adopting such measures would make possible an energy saving of about 1 million tons of standard fuel per year.

The state target program, "The Rationalization of the Consumption and Utilization of Fuel and Energy," is a comprehensive program applicable to the whole national economy and containing a number of concrete, specific projects which, however, require the adoption in several sectors of several macroeconomic decisions. Its implementation is a precondition for the equilibrium of the fuel and energy

balance between 1980 and 1990. It is therefore necessary that it be incorporated into all components of the five-year and yearly plans for national economic development, and that all responsible levels of management concern themselves with its systematic implementation and monitoring.

The actual content of the program is focused on specific measures with a broad national economic impact. This in no way means that there is less significance attached to so-called minor measures for rationalizing the consumption and conservation of fuel and energy. The undoubted and important national economic role of these measures confirms the fact that such measures, which as a rule do not require excessive resources and may be implemented on a mass scale in all sectors and areas of consumption, have accounted for roughly 45 percent of the overall fuel and energy savings achieved in the current five-year plan. At the same time, the existing possibilities for such savings are far from exhausted. Therefore, the mobilization of these reserves must be a permanent component of daily management work at all facilities and at all management levels.

9276

CSO: 2400

NATIONAL ECONOMIC RESULTS FOR 1980 ANNOUNCED

Prague RUDE PRAVO in Czech 23 Jan 81 pp 1, 3

[Federal Bureau of Statistics report: "Results of National Economic Development in 1980]

[Text] In spite of problems, the national income increased by 3 percent, industrial production by 3.2 percent and agriculture by 6 percent. Capital assets valued at Kcs 132 billion became operational. Raw material and energy savings are inadequate. Two-fifths of the construction enterprises have not fulfilled their plan. Export to have priority over imports, growth of personal cash incomes. Per capita public consumption during 1980 came to Kcs 8,900.

Even under the difficult conditions, the development of our economy in 1980 continued, and the economic potential increased. On this basis the already high living standard was maintained and the national social programs have been strengthened. Increased asset formation in all the principal production sectors also made it possible to allot more capital for future economic growth. The unceasing effort of party and government bodies, supported by the workers, was reflected in the achievement of the demanding tasks of last year.

Based on preliminary information, national income in 1980 increased by 3 percent over 1979, industrial production by 3.2 percent, agricultural production by 6 percent, and construction projects by 1.3 percent. Structural improvements in the economy continued. We have succeeded in increasing the rate of exports over the rate of imports.

In industry, in consonance with planned trends of priority production growth, engineering and sectors based on processing of domestic raw materials were further strengthened. Measures in the area of asset formation and fuel and energy management made possible a relatively smooth supply for industrial and public consumption, even though there is still room for further improvement.

In agriculture good results were achieved in the harvest of grain and rape, whereas the harvest of potatoes, sugar-beets and corn was lower than planned.

Production and procurement of animal products reflected the intent of the plan. It was still necessary to import a portion of fodder.

Despite some improvements, increased efficiency in economic activity has not proceeded fast enough, especially, we failed to achieve substantial savings in the consumption of energy and raw materials and in raising their assessment in the products. The desired standard in customer-supplier relations was not achieved. The effects of science and technology on increased labor productivity, higher quality and technical level of products, as well as on production costs, still does not correspond to the needs of permanent growth of efficiency and quality.

State plan tasks in industrial production was 0.3 points below plan and fell short in some industrial production deliveries; in agriculture it fell short by 0.8 points, and in the construction industry by 3.0 points.

Nationally, capital formation increased by 1.2 percent in comparison to 1979. Plan fulfillment improved in the most important construction projects designated as priority tasks. The construction industry, however, fell behind the planned tasks both in terms of overall volume and structural and quality indicators. In capital investment projects the developments were uneven; the completion rate of construction projects was unsatisfactory and public facilities and utilities in housing developments lagged behind.

In connection with variances in the development of resources, considerable attention was devoted to meeting the needs of domestic and foreign trade.

CSSR participation in the international division of labor, especially within the CEMA countries, was increased. Close cooperation with the USSR was given special emphasis. The overall turnover in foreign trade rose, in comparison with 1979, by 11 percent, of which 8.3 percent was in trade with socialist countries. Exports of engineering products, especially to nonsocialist states, were not fulfilled.

The process of satisfying the material and cultural needs of the population has been further improved. In comparison with 1979, personal income rose by 4.1 percent, and retail sales by 2.0 percent. There was a significant increase in free services and products in health care, education, as well as in other sectors of social needs. A total of 127,800 apartments were delivered for occupancy.

I. DEVELOPMENT OF RESOURCES

Industry

Industrial production in centrally-planned industry increased in 1980 by 3.2 percent over 1979, i.e., by 0.3 points less than intended by the annual state plan.

Overall deliveries of products and goods in the centrally-planned industry increased by 3.7 percent. In the individual areas of final sales, deliveries for export rose by 3.4 percent and deliveries for domestic trade by 3.0 percent. Deliveries of plant and equipment to meet the needs of capital investment fell by 1.2 percent.

In the course of the year, some production sectors had difficulties in meeting the planned structure of sales, as well as in meeting agreed upon delivery deadlines, which had a negative effect on the even flow in production and also affected the overall fulfillment of indicators which are essential in the current plan assessment. Almost half of the industrial enterprises did not meet all selected indicators.

Tangible costs, less writeoffs of long-term assets, fell relatively short in comparison with 1979 by 0.6 percent, and outlays for wages remained on the level of 1979. With a relatively higher growth in writeoff allocations by 4.5 percent, and financing costs by 3.9 percent, overall cost of industrial production remained roughly at the 1979 level.

Labor productivity in centrally-planned industry (measured by the share of gross production per individual worker in comparative prices as of 1 January 1977) increased by 2.5 percent over 1979, i.e., by 0.3 points less than set by the state plan. Labor productivity accounted for 80 percent of the increase in industrial production. The average monthly wages of workers in centrally-planned industry reached 2,764 korunas, i.e., 67 korunas (2.5 percent) more than in 1979. Planned relations between the increase in labor productivity and average wages, were not achieved.

Utilization of working hours fell from 91.7 percent in 1979 to 91.3 percent in 1980. The coefficient of shift work in industry rose slightly from 1.323 in 1979 to 1.324 in 1980, the utilization machinery, however, has not improved. The share of overtime work was 5.9 percent, i.e., roughly the 1979 level.

In the centrally-planned industry, there were 2,647,000 workers in 1980, i.e., 17,000 more than in 1979.

The following results were achieved in 1980 in the individual industrial sectors:

In the coal industry, 123.1 million tons of coal and lignite were extracted, i.e., 1.3 percent less than in 1979. The state plan of extraction was fulfilled 98.9 percent, of which the black coal plan was exceeded by 0.4 percent and brown coal and lignite mining fell by 1.5 percent below plan. There were problems in meeting planned extraction goals in the Most SHD [North Bohemian Lignite Mines].

Suppling of national economy with electricity was, on the whole, even. In energy development, we felt the beneficial effects of increased generation in the V 1 nuclear power plant and in the hydro-electric power plants resulting from favorable water flow. The nuclear plant produced 4.5 billion KWh of electricity, i.e., 2.4 billion KWh more than in 1979, and production of electricity in the hydro-electric plants increased by 14.0 percent.

Overall production in metallurgy increased by 1.2 percent, of which mining of ores rose by 3.1 percent, and ferrous metallurgy production by 1.3 percent, while production of nonferrous metals remained roughly at the 1979 level. There was a drop in rolled materials from low grade steel of 1.0 percent, while production of rolled materials from high grade steel rose by 5.6 percent.

Engineering production rose by 4.6 percent, of which heavy engineering by 3.7 percent, general engineering by 4.8 percent and electronic industry by 5.3 percent.

In the course of the year we have further improved some of the modern, advanced production branches in equipment for nuclear energy production and electronic parts production base. The fastest increases were registered in the production of machinery and equipment for nuclear power plants by 8.4 percent, micro-electronic circuits by 51.9 percent, data processing technology by 11.5 percent, machinery for civil, building, and road construction of 11.5 percent, textile machinery by 9.3 percent, trolley-buses by 6.8 percent, and automatic washing machines by 9.2 percent.

Despite a significant increase in the production of spare parts as, for example, for wheel excavators and earth movers of 12.1 percent, for rail freight of 13.2 percent, and for tractors of 11 percent, we have been unable to quite meet their planned volume and selection, especially in passenger automobile and truck spare parts.

In the chemical industry we achieved an overall increase in production by 2.7 percent, of which in the chemical industry and oil refining by 2.2 percent, in the rubber and plastics industry by 5.4 percent, and in the paper and cellulose industry by 3.0 percent. In addition to a large increase in the chemical fibers production by 8.9 percent, there were increases in the production of plastics by 4.8 percent, viscous clips by 4.8 percent, unbleached sulfate cellular textures by 6.3 percent, and nitrogenous fertilizers by 4.6 percent. Due to start-up difficulties in production, there were problems in meeting the planned tasks in the production of cellulose.

Production of building materials increased by 4.4 percent. Of the basic materials, cement production rose by 2.8 percent, lime by 1.7 percent, building panels by 2.7 percent, bricks by 5.8 percent, and ceramic tiles by 16.7 percent.

The overall volume in consumer industry production increased by 3.8 percent. The greatest increase was achieved in the wood processing industry by 4.9 percent; textile production rose by 3.6 percent, the glass, porcelain, and ceramics industry by 3.1 percent, the leather processing industry by 2.8 percent, and the printing industry by 3.5 percent.

The overall increase registered in the food industry was 1.7 percent. The largest increases were achieved in dairy production by 5 percent, and in the production of oils and fats by 4.8 percent.

Agriculture

Continued cold weather during practically the entire vegetation period, was reflected in delayed growth of plants and a late harvest as well as in low volume and poorer quality of the crop.

Overall, gross agricultural production reached 84.6 billion korunas (in constant 1967 prices), of which 37.4 billion korunas was in plant production. Compared

with 1979, the volume of agricultural production increased by 4.8 billion korunas. In comparison with the annual state plan, however, the actual results were short by 0.8 percent.

Among the positive results in agricultural plant production was the grain harvest. The average hectare yield was 4.13 tons, which was 1.2 percent more than planned and 16.7 percent more than in 1979. At the same time the yield per hectare varied considerably in different areas. For example, a good crop was achieved in all of the West Slovak kraj and in some okreses of the South Moravian kraj. The average per hectare yield in these areas was in excess of 5 tons.

Good results were achieved in the harvest of rape which will make it possible to reduce imports of oleaginous plants. The state-wide average of per hectare yield of rape reached 2.27 tons. On the other hand, the planned yield was not achieved in sugar beets, and especially in potatoes where, in addition to a poor crop, harvest losses caused by greatly delayed harvest contributed to a low yield.

Harvest of Selected Crops

Item	1979	1980		Diff+ 1979	In 1,000 tons comp. with 1980 plan
	Actual	Actual	Planned	Actual	
Grain overall,	9,179	10,742	11,000	+1,563	- 258
of which:					
Corn for seed	949	801	980	- 148	- 179
Rape	80	213	192	+ 133	+ 21
Potatoes	3,725	2,713	3,900	-1,012	-1,187
Sugar beet	7,645	7,250	8,200	- 395	- 950
Perennial fodder (in terms of hay value)	3,811	5,302	5,423	+1,491	- 121

State purchases amounted to 3,497,000 tons of grain, 209,000 tons of rape, and 988,000 tons of consumer potatoes. The procurement plan was fulfilled in grain and rape, while in potatoes it fell short by 33.3 percent. Procurement of grain for fodder was higher than in 1979.

Planned development of animal production, and its supply with fodder, required imports to supplement the low 1979 harvest of grain fodder. This measure provided conditions for raising the number of farm animals and their utility value. The most pronounced increase was achieved in the average annual milk yield which reached 3,089 liters, i.e., 133 liters more than in 1979, and an overall increase in milk production of 237,000,000 liters. The average annual yield of eggs was 228 (in 1979 it was 224). In the socialist sector of agriculture, in the feed cattle we achieved an average daily utility increase of 0.72 kilogram (in 1979 it was 0.71 kg), and in the feed hogs, including the early post weaning period the gain was 0.516 kg (in 1979 it was 0.505 kg). For every 100 cows there were an average of 98.48 calves, and 16.71 farrows per sow. Compared with 1979, there were 27,000 more calves and 488,000 more farrows.

By the end of 1980, the number of cattle reached 5,002,000 (in 1979 it was 4,915,000), of which 1,902,000 were cows (1,903,000 in 1979). The number of hogs reached 7,894,000 (7,588,000 in 1979).

Development in animal production contributed to the fulfillment of the procurement plan of animal products.

Procurement of Animal Products

Item	Unit of Measure	1979 Actual	1980		Diff+ Against 1979	1980 Plan
			Actual	Planned		
Slaughter animals, overall	1000 tons liv. matter	1,577	1,599	1,595	+ 22	+ 4
of which:						
Cattle	"	660	669	679	+ 9	- 10
Hogs	"	889	902	888	+ 13	- 14
Poultry	"	238	245	228	+ 7	+ 17
Milk	million liters	4,921	5,163	5,010	+242	+153
Eggs	million units	2,540	2,683	2,620	+143	+ 63

Deliveries of industrial fertilizers for agriculture in 1980 reached 1,730,000 tons which represents an average consumption of 253 kg of net nourishment value per one hectare of agricultural land. Over 37,000 hectares were drained, while 16,000 hectares were irrigated.

During 1980 there were 1,747 JZDs [Unified Agricultural Cooperatives] with average acreage of 2,474 hectares of agricultural land. State farms (including detached plants and sectoral enterprises) numbered 203 and their average acreage was 6,784 hectares of agricultural land. A total of 352 joint agricultural enterprises and 591 cooperatives were operating in our agriculture.

Forestry

In 1980 the overall yield in timber was 18,517,000 cubic meters, i.e., 119,000 cubic meters more than in 1979. The intentions of the annual plan of operations were exceeded by 169,000 cubic meters. Timber deliveries of 16,950,000 cubic meters were 92,000 cubic meters higher than in 1979, and exceeded the plan by 39,000 cubic meters. The share of coniferous timber in the overall yield and deliveries reached 77.0 percent. The share of timber from natural disaster areas yielded 41 percent of the total.

Besides providing the national economy with a valuable raw material, the forest industry was also meeting demanding tasks in cultivation, especially in reforestation and care for forest growth. In order to protect the forest, large-scale operations were mounted last year against the spruce budworm in the Jizerske Hills and Krkonose Mountains. Areas covering over 45,800 hectares were reforested.

Water Resources Management

Processing of drinking water increased from 1,436,000 cubic meters in 1979 to 1,496,000 cubic meters in 1980. The portion of the population supplied with water from public conduits reached 70.1 percent by the end of 1980, and people living in housing connected to public sewers accounted for 57.6 percent. The plan was exceeded in all cited indicators.

By the end of 1980, there were in the CSSR 566 waste water filtering stations under water management organizations controlled by the national committees (19 of these stations were built in 1980). In order to ensure sufficient drinking water, the expansion of water installation capacities continued, and public water mains became operational in 90 additional communities.

The Construction Industry

In the most important construction projects, designated as priority tasks, the overall planned volume was exceeded. The construction enterprises, however, failed to implement the necessary capital construction projects, including comprehensive housing developments,

The construction enterprises accomplished with their own labor resources operations amounting to 82.6 billion korunas, i.e., 1.3 percent more than in 1979. In comparison with the plan, however, the achieved pace was 3.0 points below. Enterprise plans were fulfilled by 135 construction enterprises, i.e., 58.2 percent of the total. Also unsatisfactory was the fulfillment of indicators which are decisive in the current assessment of plan fulfillment. All indicators were met by only one-fourth of the enterprises in which these indicators were prescribed.

Smooth operation in the construction industry were adversely affected especially by the number of unfinished projects which made management difficult, and by the stagnating rate of utilization of construction machinery. Also disappointing was the failure to fully utilize the work time during individual shifts.

Plan fulfillment and developments in the construction industry were also adversely affected by the worsening of design and site preparation in initiated construction projects, and shortcomings in the national industrial distribution system.

An average of 556,000 workers were employed in the construction industry, i.e., roughly the same number as last year. The number of workers in actual construction jobs, however, decreased as compared with 1979 by almost 1,000 people.

Labor productivity in construction enterprises rose by 1.4 percent, i.e., 2.6 points less than required by the annual state plan.

The average monthly wages of workers in the construction industry rose in comparison with 1979 by 1.5 percent (the state plan called for an increase of 2.5

percent) and reached 2,920 korunas. The planned linkage of increase in labor productivity with growth in average wages was not achieved.

Transportation and Communications

Public freight transport moved 632.4 million tons of goods, which is 1.8 percent more than in 1979. The state transportation plan was fulfilled 100.2 percent.

Rail transport moved 286 million tons of goods, i.e., 0.9 percent more than in 1979. Planned rail freight loading tonnage was fulfilled 99.5 percent, which represented 237.9 million tons and exceeded the 1979 level by 400,000 tons. Shortcomings persisted in rail transport in the meeting of schedules. Average of a car unit cycle was longer than planned, and the average downtime increased over 1979. This situation was affected by the shortage of workers in essential jobs, the inadequate structure of spare parts deliveries for capital repairs, and some shortcomings in the railroad technological base.

In the road freight, the CSAD [Czechoslovak Road Vehicle Transport] moved 335.9 million tons of goods, which is 2.1 percent more than in 1979. The state plan was fulfilled 100.0 percent. Development in road transport was affected by a constant increase in down-time of the vehicle park, especially as a result of shortages of spare parts and repair facilities.

River transport moved 10.5 million tons of cargo, i.e., 19.1 percent more than in 1979. The increase was largely due to increasing deliveries of fuel coal for the Chvaletice electric plant.

Public passenger transports carried 2,537 billion people, thus raising the number of fares by 87 million. The number of passengers serviced by the CSAD rose by 82 million over last year.

Two extended lines of the Prague metro, II C and II A, were put into operation, which resulted in the planned length of 20 kilometers. The number of passengers transported in 1980 was 216.9 million, i.e., 104.8 percent more than in 1979. Peak operations occurred during the Spartakiade, when the daily average number of passengers was 656,500.

In communications, telephone service has further expanded, including automatic long-distance and international dialing operations. New transmitters improved the television reception.

The number of telephone lines increased in 1980 by 78,000, of which 22,000 were private housing lines. As of 31 December 1980, there were 3,150,000 telephones in operation, of which 1,122,000 were private lines. We have achieved an average of 20.57 telephones per 100 inhabitants. By the end of 1980 there were 154 automated district telephone centrals.

The share of automated international traffic control systems rose to 91.67 percent.

Preparations were completed for the introduction of a new service--facsimile transmission of newspaper pages over the telecommunications network.

In radiocommunications, three basic transmitters for the second television program became operational in Frydek - Lysa Hora, Vimperk - Marsky vrch, and Mikulov - Devin. This expanded the coverage of CSSR territory with the second television program to 65 percent.

Production of Important Industrial Products

	Unit of measure	Reality in 1980	% State plan fulfillment	1980 in % of 1979
Black coal (basin yield for sales)	thous. tons	28,201	100.4	99.1
Brown coal (" " including lignite)	" "	94,890	98.5	98.6
Electricity	mil. kWh	72,682	101.3	106.8
Raw steel	thous. tons	15,225	95.2	102.7
Rolled material	" "	10,760	94.8	99.8
Nitrogen fertilizers	"/N	618.3	100.5 ²	104.6
Potash fertilizers	"/K ₂ O	203.0	104.8 ²	102.2
Plastics	"	893.9	99.7	104.8
Chemical fibers	"	165.1	99.1 ²	108.9
Automobile and truck tires	thous. units	3,123.4	100.1 ²	103.5
Passenger cars	unit	183,746	98.8	100.9
Trucks	unit	45,688	100.0	105.6
Agricultural machine (less tract.) ¹	mil. kor.	2,337.6	101.4 ²	107.0
Washing machines	thous. units	355	100.3 ²	109.4
Cement	thous. tons	10,546.4	97.7 ²	102.8
Lime	"	3,018.4	99.7 ²	101.7
Furniture (wood & other) ¹	mil. kor.	6,685.3	101.0	106.6
Cotton fabrics	mil. meters	561.6	100.5 ²	101.9
Wool fabrics	"	59.0	100.3 ²	101.7
Footwear, overall	mil. pair	114.5	98.3 ²	98.0
Meat in slaughterhouse form	thous. tons	963.4	100.6	101.7
Dairy butter	"	128.1	103.6	106.4
Refined sugar	"	778.9	80.6	84.8
Beer	thous. hecto-liters	23,393	100.0 ²	99.1

¹ less local industry and the Union of Production Cooperatives

² percentage of total of enterprise plans

II. CAPITAL INVESTMENT

The volume of investment projects and deliveries implemented in the national economy (less project "Z" [community self-improvement program] and private building projects by citizens) was, in comparison with 1979, higher by 1.2 percent. The achieved pace was 0.8 of a point lower than anticipated in the state plan.

Despite certain improvement, deviations from the intentions of the state plan appeared in the capital investment structure. Machinery and operating equipment deliveries exceeded the planned volume, whereas the planned volume in construction projects was not achieved. The volume of construction projects increased by 1.4 percent, and the volume of machinery and operating equipment deliveries by 0.9 percent. The annual state plan for implementing capital investment projects and deliveries was fulfilled 99.3 percent, of which construction projects were fulfilled 95.6 percent, and machinery and operating equipment 104.0 percent.

In the implementation of tasks in individual categories of construction, more attention was devoted to projects with a priority designation. Through concentration of assets and technological deliveries for the priority projects we have achieved better results in this category than in other types of construction. Despite relatively better results in volume indicators in priority construction, operations in a portion of these projects were not in consonance with the harmonograms [progress and time charts] of development, which led to delays in putting some of the assets into operation. Moreover, budget costs of unfinished construction projects continued to rise.

Capital investment provided new long term assets in the amount of 132.0 billion korunas, i.e., 0.1 percent more than in 1979.

For example, during 1980 the following assets became operation: the nuclear power plant Jaslovské Bohunice—block no. 2; 500 MW block in the Melník III power plant (test operations); new section to the gas pipeline (transfer of the Chodov-Sokolov line); completion of the Matador-Bratislava plant; the Teplice heating plant; expansion of the production base in the Sigma-Zavadka plant; the wire-producing plant at Křohovec; highway sections Humpolec-Pavov and Hustopeč and on the Czech-Slovak border; and the extension of the Prague subway lines "A" and "C".

III SCIENCE AND TECHNOLOGY

In research and development we have still not achieved a meaningful acceleration of the "research-production-practical application cycle," even though there were some positive results reflected especially in the quality of new products and a growing number of inventions and improvement suggestions which have benefitted the society.

The production volume of new products continued to rise; nevertheless, its share of the overall production of goods remained low, and not all new products achieved a high technological level and utility.

State research and development tasks were fulfilled 91.3 percent, and implementation (results of completed research tasks planned in 1980 for production and practical application) 89 percent. In comparison with 1979, however, fulfillment was better in both state research and development tasks and in implementation.

During 1980 we have successfully completed, for example, research work on a second generation harvester-cutter which operates almost three times as efficiently as currently used equipment; another research task was concentrated

metal-forming operations for the manufacture of parts made of tin plate up to size 1.2 X 2.5 meters. We have completed research on modern methods of protecting pipelines, cables, and other buried equipment against corrosion, which extends the life of pipelines by an average of 10 years.

Implementations in 1980 included a concentrated effort to produce instruments for numerically controlled machinery, and the technology of continuous excavation of horizontal mine shafts of 3.2 meters in diameter, and others.

IV. FOREIGN TRADE

As in previous years of the Sixth Five-Year Plan, foreign trade development was affected by complicated external and internal economic conditions.

The basic task in the overall effort to achieve higher quality and efficiency in foreign trade was the achievement of a higher rate of growth of exports over import, as a necessary prerequisite for improving the commercial balance of payments.

In 1980 69.9 percent of all Czechoslovak foreign trade was with the socialist countries, while the greatest portion of our raw material and energy needs was ensured through long term trade agreements with the CEMA member countries. The by-and-large favorable development in trade with the socialist countries benefitted from the process of socialist integration, especially as a result of increased cooperation with the CEMA member states. Conditions were further improved for more effective utilization of material and natural resources by participation in the formation of raw material assets. The overall exchange with the CEMA member countries increased, in comparison with 1979, by 8.2 percent. Trade with the USSR rose by 11.9 percent.

Turnover with the nonsocialist states increased 17.9 percent. In this area the overall dynamism of foreign trade relations was affected by rising prices and continuing economic fluctuations resulting from a raw material, energy, and currency crisis. Despite the complicated situation on the nonsocialist markets, we have succeeded during 1980 in increasing the pace of exports over imports.

V. LIVING STANDARD

The number of people employed in the national economy in 1980 was 7,340,000, i.e., 0.8 percent more than in 1979. Roughly 380,000 women were on maternity leave. Employment in the socialist sector (less the JZDs) increased also by 0.8 percent to reach more than 6,600,000 people in 1980.

The number of workers in the service industry increased at a faster rate (1.3 percent) than in the production (0.5 percent). The highest increases occurred in education, culture, and health care.

The average percentage of workers' disability due to illness or accident was 4.4 percent.

Overall personal income of the population reached 357.1 billion korunas and, in comparison with 1979, was 4.1 percent higher, i.e., 13.9 billion korunas. Earnings from wages, the largest source of income, rose by 3.5 percent, which represents 7.6 billion korunas. Social transfers increased by 8.0 percent, i.e., 5 billion korunas.

The average monthly wages of workers in the socialist sector of the national economy (less the JZDs) rose to 2,640 korunas, i.e., 2.4 percent higher than in 1979. The increase in savings and cash assets amounted to 10.4 billion korunas in 1980. The state savings banks authorized loans in the amount of 11.1 billion korunas.

Supply of the domestic market was relatively smooth, yet was not always fully in consonance with the structure of demand.

Retail turnover of all trade systems reached 235 billion korunas (in current prices) in 1980, which is 5 billion more than in 1979 and 0.5 billion less than the annual state plan. In the food industry the principles of correct nourishment were emphasized. Retail turnover in industrial goods reached 135 billion korunas (0.7 percent more than in 1979), a share of the total retail turnover of 52.9 percent as against a planned share of 53.9 percent.

Social consumption of the population rose, in comparison with 1979, by about 5 percent, representing a per capita amount of 8,900 korunas. In 1979 this was 8,519 korunas.

Total social security payments (retirement benefits, medical and hospitalization insurance) in 1980 amounted to 68.4 billion korunas of which retirement benefits were 42.3 billion. In comparison with 1979, payments for medical and hospitalization insurance were 2.9 billion higher (12.4 percent) and payments for retirement benefits 2.7 billion higher (6.8 percent).

By the end of 1980 the number of retirement annuities reached 3.78 million, of which the number of annuities for senior citizens increased by 35,000.

Supplemental payments for children amounted to 13.4 billion korunas, i.e., 16.5 percent more than in 1979. The total amount of financial aid to families with children reached 19.4 billion korunas.

Kindergartens cared for 695,000 children. 240,000 pupils completed primary education in 1980. Of these, 39.5 percent were placed in advanced education and 54.6 percent in apprenticeships. The total number of apprentices was 375,000, of which 47,000 were secondary schools issuing matriculation certificates. There are 389,000 students in all types of secondary schools (school year 1980/81), and 151,000 students at university level.

The number of beds in health institutions rose to roughly 190,400. Of this, number of hospital beds increased to 119,200. There were 315 people per physician. Infant mortality was 18.2 percent.

Characteristic in the cultural sphere was further development in special interest, artistic, and extracurricular educational activities. Some 574,000 people were organized in cultural groups and ensembles. More than 2.5 million people took part in individual activities of extracurricular education. The number of theatergoers was 8.5 million, and roughly 81.5 million people visited motion picture houses.

In housing construction, 127,800 apartments were completed, i.e., 5,000 more than in 1979. The plan for finished housing was fulfilled 97.9 percent.

Of the total number of housing units, 28,400 were built under the communal system, 46,000 by cooperatives, 21,100 in enterprise construction, and 32,300 by individual private builders. During 1980 construction of 109,400 new housing units was initiated.

The natural increase in population was 4.0 per 1,000. During 1980 there were 119,000 marriages and 33,000 divorces. The number of children born alive was 247,000.

9496

CSO: 2400

CSSR STANDARD OF LIVING EXAMINED

Prague DOKUMENTACNI PREHLAD in Czech 7 Jan 81 pp I 7-I 14

[Article: "Rise in Worker Living Standards in CSSR"; author not given]

[Text] A high level of employment which places us among the leading countries of the world in this regard, and which provides all our workers with the certainty of a stable employment situation, contributes to the constant increase in the living standard of our citizens. This rise in living standards is then reflected in the development of material well-being, in a strengthening of social certainties, in the broad area of cultural life, and in the use of free time.

Money Incomes of the Population

The money income of the population (wages, special payments from united agricultural cooperatives, income from social security, and other sources) increased 4.3 times from 1953, when it began to be followed, to 1979. In 1953 the average per capita money income (including children) was Kcs 6,300, while in 1979 it had risen to Kcs 22,375. Between 1969 and 1979 money incomes recorded an increase of Kcs 150 billion, in comparison with a mere Kcs 119 billion over the preceding 15 years. The money incomes of the population increased by 23 percent during the Sixth Five-Year Plan.

Evolution of Money Incomes of the Population (in billions of Kcs)

	<u>1953</u>	<u>1960</u>	<u>1970</u>	<u>1975</u>	<u>1979</u>
Money incomes-total	81	121	226	292	343
Composed of: wages	58	84	148	187	219
agricultural	6	10	18	20	21
social	11	19	40	52	63

High incomes make it possible for people to set aside funds for the purchase of more expensive goods, for a foreign vacation, for the construction of family homes, as a reserve for old age, etc. Deposits by individuals at the end of 1979 had reached approximately Kcs 148.8 billion. This means an average of Kcs 9,765 per capita, and Kcs 29,295 per household. In addition, the population had at its disposal the amount of Kcs 39 billion in currency.

One of the fundamental ways of increasing the general and social certainties of our workers over the past 10 years has been a committed effort to implement the socialist principles of compensation for work performed. In the past 10 years (1969-1979), the average wage has increased by 43.8 percent (Kcs 767), while during the last 3 years its growth rate has been 9.2 percent (Kcs 213). In 1960, 53 percent of the households had a per capita monthly income of less than Kcs 600. By 1970 this figure had declined to 15.4 percent of the total, and by 1979 only 4.3 percent of all households had less than Kcs 600 monthly per capita income. More than half of all households had a monthly per capita income greater than Kcs 1,200 in 1979. The average monthly wage in 1968 was Kcs 1,750, in 1978 Kcs 2,517, in 1979 Kcs 2,580, and by the end of the five-year plan the average monthly wage had reached Kcs 2,643, which represents 15 percent more than in 1975. By 1978 the wage level of cooperative farmers had become equal to that of employees in the other sectors of the national economy.

Average Wages, by Sector (in Kcs)

<u>Sector</u>	<u>1978</u>	<u>1979</u>
National economy-total	2,517	2,579
Industry	2,580	2,653
Construction (including design activities)	2,814	2,875
Transport	2,927	3,015
Agriculture (State farms)	2,434	2,488
Retail Trade	2,079	2,161
Health care and social services	2,344	2,399
Education	2,398	2,449
Communal services	1,933	1,982
Science and research	2,861	2,917

Social Consumption

Between 1961 and 1979, social consumption increased almost threefold, and presently accounts for more than one-third of the total consumption of the population. It thus represents an additional important aspect of the basic social certainties of the citizens of socialist Czechoslovakia. The total volume of social consumption funds in 1979 was Kcs 130 billion, which amounts to Kcs 8,472 per capita.

Personal Consumption

The personal consumption of the population has grown constantly and dynamically in recent periods. It has grown to a level that is comparable with the most developed countries of the world. By 1979 it had grown to 4.2 times the 1948 level, with 45 percent of this increase coming between 1969 and 1979. In money terms, it reached a yearly figure of Kcs 14,400 per capita in 1975, as opposed to 4,500 in 1948. Personal consumption increased by almost 11 percent during the Sixth Five-Year Plan.

Czechoslovakia belongs among the economically advanced countries of the world in its consumption of foodstuffs. Prior to World War II, foodstuff consumption was at a level of only 2,500 calories per person per day, which was below the medically advised norm, and a portion of the population suffered from malnutrition. In the course of a few postwar years the nutritional level rapidly improved. Since 1956 the daily caloric intake has reached approximately 3,000 calories, i.e., the medically prescribed norm, and one-third of the population actually exceeds this standard. In the past 15 years the composition of the diet has also significantly improved. Flour consumption is declining and that of sugar is stagnating, while more meat, milk and eggs are being consumed. In 1979 meat consumption reached 85 kilograms per capita, which means that it moderately exceeds the prescribed level, and that it is higher than that of Sweden, Italy and Great Britain, for instance, and almost the same as that of Austria and the Federal Republic of Germany. With regard to nutritional value there is still a low level of fruit and vegetable consumption in Czechoslovakia. Likewise, the consumption of milk and milk products per capita is roughly 7 percent below the recommended amount.

Food Consumption per Inhabitant (in kilograms)

	<u>1948</u>	<u>1960</u>	<u>1970</u>	<u>1975</u>	<u>1979</u>
Meat - total	28.9	56.8	71.9	81.1	84.3
Milk and milk products (as milk)	173.1	173.0	196.2	210.4	226.5
Eggs (units)	114	179	277	297	311
Fats	10.5	19.3	22.9	19.9	20.0
Grains (as flour)	120.4	125.9	113.5	108.1	108.0
Sugar	22.3	36.3	37.7	38.0	38.6
Potatoes	113.5	100.3	103.4	95.8	88.0

In the past 25 years the prices of basic foodstuffs--bread, flour, meat, milk, fats and eggs--have not changed, while over the same period incomes have increased 3.8 times.

The consumption of basic industrial products has also been constantly on the increase. The outfitting of Czechoslovak households with textile goods and clothing has reached a world class level. Yearly sales of cloth per inhabitant exceed 49 meters (which is more than such sales in Austria and France, and roughly the same as in Belgium, the Federal Republic of Germany and Sweden), 14 pieces of clothing and linen, and 4.6 pairs of shoes. In recent years cloth and footwear consumption has leveled off, and demand has shifted to more exclusive types of goods.

The level of outfitting of Czechoslovak households with durable consumer goods has reached the level of the most advanced countries. The outfitting of households with personal cars and all goods belonging to modern housekeeping is becoming integrated into the sales structure of industrial goods.

Consumption of Selected Industrial Goods per Inhabitant

Goods	Unit	1937	1948	1955	1960	1970	1975	1978	1979
Cloth-total ¹	meter	26.0	23.0	29.3	35.6	43.3	45.6	49.6	49.3
Footwear	pairs	2.4	2.4	3.5	4.2	4.7	4.5	4.6	4.6
Electricity ²	kWh	19.5	--	83.2	109.6	278.9	431.0	536.1	536.9
Gas ²	cubic meters	4.8	--	18.4	27.0	67.0	95.9	125.5	129.4

Notes:

1. Clothing goods recalculated as cloth
2. Consumption in households per inhabitant

Consumption of machinery industry goods of a consumer character is growing dynamically. In accordance with this, household water and electricity consumption is rapidly increasing. One of the most significant changes in the development of personal consumption is the fact that the share of industrial goods in aggregate retail trade turnover has surpassed the share of foodstuff sales, representing 53.6 percent of total sales in 1979. Radios are commonplace, and almost all households have washing machines and televisions. Almost nine-tenths of all households have a refrigerator, and 40 percent of them have a private car. The outfitting of households with private cars, refrigerators and televisions increased very rapidly after 1969.

In household ownership of refrigerators, Czechoslovakia is at the level of Great Britain (and in front of Italy and Austria), while more of our households have washers than anywhere in the world, and there are more televisions here than in Austria, France, Belgium, Switzerland and Japan. Regarding automobiles, Czechoslovakia is still behind Western, economically developed capitalist countries, but it is catching up fast in this area as well. And there is a significant number of households which own a cottage for recreation.

Household Ownership of Consumer Durables (per 100 households)

Goods	1937	1953	1960	1970	1975	1978	1979
Refrigerators	0.7	2	11	56	79	88	90
Washing machines	4	18	54	86	110	120	120
Radios	27	69	89	141	171	180	180
Televisions ¹	--	--	21	74	97	100	101
Private cars	2	3	6	18	30	38	40

Notes:

1. Not including Mutiservis

Progress in the resolution of the housing issue belongs among the most important successes in the development of living standards in the past 10 years. Since the end of World War II 2.6 million apartments have been built, more than half of them (1.4 million) since 1969. Almost 3.5 million citizens have moved into new apartments. New apartments are, for the most part, equipped with central heating, hot water, gas, laundry rooms, etc. About 60 percent of all families currently reside in apartments with fully modern facilities.

New Apartments

	<u>1948</u>	<u>1960</u>	<u>1970</u>	<u>1975</u>
Total construction	21,683	73,766	112,135	144,678
Composed of				
state apartments	11,883	42,125	18,850	32,809
cooperative apartments	--	8,830	44,240	39,089
enterprise apartments	--	4,885	19,639	34,201
individual apartments	9,800	17,956	29,406	38,579

Last year 122,700 apartments of all types were completed. The state budget made a significant contribution to the financing of apartment construction and maintenance, in the amount of Kcs 23 billion.

Great attention in the CSSR is devoted to the environment. In several areas there has been success, despite a significant expansion of industry, in halting the worsening in the environment, and even occasionally improving it.

The linking of all communities by telephone, completed in 1953, and the full electrification of communities and apartments by 1960 belong among the important successes of socialist construction. Not only the cities, but also all the larger communities, have health care facilities, schools and kindergartens, shops with food and basic industrial goods, and service operations. Citizens are helping significantly in improving the environment and in beautifying their communities. In 1979 alone the total value of investment projects undertaken as part of Project Z amounted to Kcs 4.96 billion, and the figure for the whole five-year plan reached Kcs 24 billion.

9276

CSO: 2400

INVESTMENT TRENDS IN CSSR FOOD INDUSTRY

Prague REVUE OBCHODU, PRUMYSLU, HOSPODARSTVI in Slovak No 12 Dec 80 pp 8, 9

[Article by Stefan Studeny, deputy minister of agriculture and nutrition of the SSR: "Capital Investment in Food Industry of the CSSR"]

[Text] When striving to meet the main target tasks stipulated by the CPCZ policy, namely, increasingly better satisfaction of our people's growing material and spiritual needs stemming from the dynamic and proportional development of our social production, one of our primary tasks is to provide appropriate nutrition.

In the era of building a developed socialist society our market was supplied with basic foodstuffs and an adequate caloric diet was provided. Our future tasks are focused on improving the overall structure of nutrition in accordance with the trends of current as well as projected development in the life style of our population and its corresponding eating habits. There are increasing demands for better quality, packaging, durability and protection of food products, for facilities for their proper handling during storage and sales, as well as during their final preparation in households or in collective dining establishments.

Our consumers are justified in voicing such demands which have found a response in extensive programs innovating the selection of products in our food industry. At the same time, additional tasks aim to reduce our dependence on imports and to achieve greater self-sufficiency in using our own resources, to make our food products competitive in foreign markets, to improve the processing of nontraditional raw materials, to process raw materials according to higher technological standards, and to adapt them to mass-production technologies and concentration in basic agricultural production.

Essential Preconditions for Development--Growth of the Technical-Production and Material Base

The new, increasing and qualitatively higher tasks of our food industry in its immediate link with the primary agricultural production are based on the further development of its technical production and material base.

The total volume of investments in our food industry in current prices during individual five-year plans appears as follows:

	First FYP	Second FYP	Third FYP	Fourth FYP	Fifth FYP
Volume of investments - total in Kcs billion	2.8	4.1	6.8	11.6	16.2
Of which:					
Investments in machinery - total in Kcs billion	--	2.2	3.7	6.8	10.3

New production capacities were built mainly in sectors processing animal production: meat, dairy, poultry processing plants, as well as new bakeries, freezing and vine-producing plants. In several sectors plants were modernized. However, the construction of storage facilities for prepared foods and semifinished goods, the building of ecological facilities, as well as development of the social program and modernization of power stations have been underestimated. In this respect a particularly unfavorable situation is evident in Slovakia in the canning and sugar industries, in Bohemia and Moravia in starch manufacture and tobacco processing, and in the milling and bakery industries.

Our agricultural production for the market rose again during the Sixth Five-Year Plan. Practically four sectors of production--meat, dairy, poultry, and in Slovakia, also the milling and bakery industries--allocated almost 75 percent of their investments for new construction in the food industry.

The material extent of investments is unfavorably affected by the continuous rise in specific investment costs per capacity unit, particularly in vital sectors (meat, dairy, bakery, and poultry plants) where average increases amounted to 70 to 100 percent over the past 10 years.

Due to the rising specific investment costs the material volume of acquired capacities corresponds roughly to no more than the increment of the preceding five-year plan.

Based on current assumptions, investment volumes will be met in general in the Sixth Five-Year Plan. It is presumed that the capital investment plan will be fulfilled at 100.1 percent (of which 99.7 percent in construction programs and 100.4 percent in machinery, which represents the amount of Kcs 19.5 billion--Kcs 12.4 billion in the CSR and Kcs 7.1 billion in the SSR) for the entire period of the Sixth Five-Year Plan.

What Is Causing the Shortcomings?

Despite the general success, the results are unsatisfactory, especially in the centrally reviewed construction projects which were supposed to affect decisively the increment in production capacities in our food industry. Although many construction projects scheduled for completion in 1980 will remain unfinished at the beginning of the Seventh Five-Year Plan, operations will begin in 48 large projects before the end of the Sixth Five-Year Plan.

Other problems pertain mainly to delayed schedules of construction, to shortcomings in material and technical supplies, to the training of the cadres for new operations, to delays in the implementation of the projected parameters, to the planning of the projects, and so on.

An unfavorable situation is evident in preparations for most construction projects irrespective of their classification in individual categories. In the sense of appropriate regulations, initial construction projects should be approved no later than 31 July prior to the year when the construction is to begin, and operational plans 4 months before the quarter when the construction is to be launched, etc.

The causes of delays in preparations have an objective as well as subjective character. This depends frequently on the approach of the executive in charge to the fulfillment of his tasks. Most VNU (economic production units) lack sufficiently organized investment divisions and concentrated management for capital investments so as to guarantee prompt improvement. However, certain other factors in evidence here often hamper prompt and thorough preplanning and planning operations.

One of the basic factors is inadequate clarification of the concepts for the development of individual areas and branches, as well as their closer correlation and more coherent long-term perspective. This causes postponements in decisions concerning the preplanning and planning operations on the part of appropriate organs.

Concepts for the development of individual branches may be under way, but in most cases their demands are extremely high. Frequent changes occurring in the course of the five-year plan negatively affect the process of capital investment and the development in individual branches of production.

Another factor undercutting the efficiency of capital investment is the inadequate cooperation of the investor, planner and supplier during the planning stage in investments. In effect, the planner and the supplier do not cooperate during the planning operations on a conceptual project, and their cooperation is frequently very formal during the following stages.

The most crucial problem which stems from unfulfilled tasks in the sector of capital investment and from delays in the completion of construction projects is the incomprehensive correlation of balances when planning capital investment.

According to the current methodology, the volumes of most supplies are presented in their sum total without any specific structural differentiation, which often fails to consider the organization of the construction project or the prepared grid chart. Obviously, this kind of balance of the investment plan and of individual construction projects fails to satisfy the demanding current requirements. The supplying enterprises often claim a lack of capacities for specific jobs and fail to deliver the necessary amount of machinery and equipment; frequently such disputes cannot be resolved even by negotiations at the highest level.

Supplier organizations consider construction projects in the food industry the most difficult in terms of technological requirements, and not very profitable in terms of economy.

Deliveries of machinery and technological equipment pose a special problem. In most construction projects the investor acts as general supplier of technology, although he usually lacks the cadres as well as the materials for that purpose.

And the licensing system does not help accelerate construction projects during their planning stage either. Many critical as well as encouraging words have been addressed to the license commission. To be sure, the authorities of the ministry or commission of state experts may deny approval for the project and prevent it from being included in the plan, but they cannot draft and submit an alternate proposal in accordance with the requirements which our society rightfully imposes on new investments. They cannot draft a new concept of the plan, impress it with a new idea and at the same time, meet the scheduled deadline. By the same token, it is clear to everyone that precisely the new concept of construction, proper exploitation of the construction site and good use of materials determine the costs of the investment, its efficiency and the extent to which it incorporates advanced technical factors.

Where Must We Seek Solutions?

It is a most complicated process to decide what must be built and even whether the construction project is at all necessary, how to implement every good idea proposed by the investors and planners, how to apply scientific and technological achievements, and how to utilize experience at an advanced level. Most investors in the food industry failed to organize the management of capital investment so as to start the construction on the approved date and to complete it on the deadline as planned. Because many vital investments are not completed on schedule, it is evident that in many instances it is precisely the management of construction operations which is the weakest link in the process of investment.

Waste water purification stations are extremely complex, and one may say, quite underrated construction projects. It is true that they are very expensive and technologically complex, and their construction is demanding, but they are indispensable in many of our food plants. The VNU have not been sufficiently concerned about this complex problem, and it is desirable that its solution as well as planning be given at least as much consideration as capacity construction projects.

One of the essential preconditions for an efficient process of replacement is more advantageous utilization of the existing fixed assets. The coefficient of shift work for workers in our food industry in the [CSSR?] dropped from 1,359 in 1975 to 1,338 in 1979. We totally failed to achieve desirable progress in the development of the shift coefficient in mechanized work and in the utilization of mechanized work.

The exacting tasks of our food industry, especially in production, rightfully demand under current conditions of limited resources of work forces that food plants be furnished with machinery and equipment of advanced parameters. In reality the

opportunities to purchase sophisticated automatic and handling machinery and equipment are increasingly restricted, not only in case of imports, but also as concerns equipment of our own manufacture.

The discrepancy between the needs and the potential of our food industry in machines engineering which has markedly deteriorated is reflected mainly in the most advanced new technologies.

The needs of our food industry are thus 35 percent covered; therefore, in the future deliveries of machinery and equipment will pose even more difficult problems.

It is certainly extremely difficult to answer the question where to find a solution. Nevertheless, the discussions at the 13th plenary session of the CPCZ Central Committee clearly and emphatically outlined the tasks of the ministries in this respect. In the future we must consider whether we are making proper use of the opportunities to cooperate within the framework of the CSSR and in the CEMA framework, and whether we may find our own solution either by producing resources for export or by utilizing jointly our own capacities.

Many bottlenecks that are still obstructing the fulfillment of the tasks in this sector call for more radical solutions, particularly as concerns supplier-consumer relations and insufficient material incentives for the participants in the investment process, which frequently hinders the achievement of capital investment. We must jointly propose measures to suppress the widespread current interest in the fulfillment of the volume indicators and to promote interest in fast-progressing construction projects of high quality at lower cost, in improved parameters and in shorter schedules of construction. Certainly these were some of the reasons why the Set of Measures for Improving the Planned Management System of National Economy After 1980 was adopted by the decision of the CPCZ Central Committee Presidium and of the CSSR Government.

The future development of our food industry will be directed in accordance with the intentions expressed in the decisions of the 13th session of the CPCZ Central Committee and in accordance with the ensuing tasks. In 1981-1985 our food industry will continue dealing with the tasks in agricultural production and with possible indispensable imports of raw materials and materials in short supply, so as to achieve the projected development in food consumption and to improve our self-sufficiency and general efficiency to an even higher degree.

With its average semiannual increment of 2.1 to 2.2 percent, the volume of our gross food production is supposed to reach the value of Kcs 108.4 billion before 1985, which represents an increment of 10.8 percent (in the SSR 14 percent) as compared with the effect anticipated for 1980.

The directive of our government for preparations for the Seventh Five-Year Plan assumes that the value of investments in our food industry will reach Kcs 21.2 billion during that period, 7.6 percent above the result projected for the Sixth Five-Year Plan. Nevertheless, this volume is substantially below the targets of our ministries included in their own concepts. At present we cannot fully

appreciate whether this is sufficient or not, especially if we consider all circumstances in supplier-consumer relations in construction projects, and their implementation and financing under the new conditions of the improved planned management system of our national economy. Yet one thing is certain. This volume of investments may be used exclusively for the solution of only the most urgent problems and capacity disproportions.

Our machine engineering ministries must expand their programs for the manufacture of machinery for our food industry and in particular, supply packing machines, which obviously involves the most serious problem. Suppliers must provide comprehensive deliveries for our food industry and increase their deliveries for new construction projects. This should eliminate our dependence on imports from the nonsocialist countries. International division of labor of the socialist community should be used to greater advantage in the manufacture of machinery for the food industry.

It is particularly important to plan the entire investment process of construction and to focus it not only on the tasks of production, but also comprehensively, with regard to the new regulations which will be applied in 1981 in the program to improve the planned management system of our national economy.

We can fulfill our new, demanding tasks only if we work in a new, better and above all, more efficient way, and if every individual is highly involved. It is our duty to upgrade our food industry and the entire agricultural and food industry sector, so that in the future it may serve as a stabilizing factor in our economy and in our political life. For that purpose we have the advantage today of a truly advanced industrial potential, highly trained people dedicated to socialism as well as the necessary support of our party and government organs.

9004

CSO: 2400

SSR PESTICIDE PRODUCTION PROBLEMS, SHORTAGES REVEALED

Bratislava PRACA in Slovak 14 Jan 81 pp 1, 4

[Article by Ivan Spani and Milan Valasek: "Where More is Needed: A Discussion of How Chemistry Helps or Does Not Help Farmers--II"]

[Text] If farmers are insisting on more effective help from chemistry they are expressing not only their special views, but also a concern which can help provide food for all of us. And if they are not satisfied with chemistry in this area they are only thinking of the shortage of materials for protecting plants from weeds and parasites. This is also confirmed in the second part of our discussions. In the first, published on 7 January, we took up the problem of supply, quality, efficacy and efficient usage of chemical fertilizers. We talked about pesticides with Academician Emil Spaldon, head of the department of plant production of the Advanced School of Agriculture, Nitra; Engr Jozef Mudroch, chief agronomist of the SSR Ministry of Agriculture and Food; Engr Frantisek Richter, employee of that ministry, and Engr Anton Jantul, head of the department of basic chemistry of the general management of Slovchemia.

Academician E. Spaldon: Effective protection against parasites and diseases is an integral part of the agrotechnology of high yields. In order to be able to utilize the biological potential of plants we must provide for their protection so that weeds do not share in the nutrients of cultivated plants. This area, however, involves a great many more problems than the selection, delivery and application of industrial fertilizers.

Engr Jozef Mudroch: If we speak favorably about the help the chemical industry gives farmers in connection with industrial fertilizers then I cannot understand why the chemical industry takes a negative attitude toward our needs! Without good quality and effective protective chemical preparations agriculture cannot make progress successfully anywhere in the world. Whereas the chemical industry increased supplies of synthetic fertilizers about fivefold in the last 15 years, in the same period the selection of chemical protective agents was reduced about fivefold.

For example, CHZJD [Jura] Dimitrov Chemical Works] in Bratislava was manufacturing 35 kinds of pesticides which we used routinely. Today they are making only 14 kinds. At the same time the Ministry of Agriculture and Food provides foreign

exchange funds for purchasing effective agents from abroad for half of the products of this sorry selection. Our chemical industry compels us to buy urgently needed pesticides from capitalist states, contrary to resolutions of the party on reducing our dependence on imports.

For example, the disinfectant Agronal, used for years in the preparation of wheat and barley seeds, is suddenly no longer being produced here, and since none of the other CEMA countries produce it either, we have to import it at a cost of millions of dollars. Without a substitute disinfectant one cannot conceive of grain production in its current form. Without herbicides we are unable to keep our fields clean and in good condition. Chemical preparations reduce crop losses up to 20 to 25 percent. This is not a negligible source of food.

Engr Frantisek Richter: Chemical protective agents are also produced by our neighboring socialist countries. For example, 15 years ago our neighbors in Hungary were buying pesticides from us. Since then they have not only caught up with us, but have become important exporters of "light chemicals." By now they have reached such a level in the production of their own and licensed preparations that these are in demand by almost all the countries of Europe. We can say roughly the same thing about the chemical industry in the GDR where, however, owing to limited capacity, they are concentrating primarily on meeting their own agricultural needs.

The selection of our domestic chemical protective preparations has not been changed for some 15 or 20 years now and that is why they are being surpassed. At the same time, it is curious that any preparation over 8 years old may be supplied for agricultural work only by an exception issued by the GRT [General Management of Trust] of Agricultural Supply and Procurement. And today we do not have a single domestically produced chemical preparation for plant protection which would not be an exception. The "youngest" preparation produced in any quantity is the 10-year-old Retacil...

In this area our chemical industry has lost at least 10 years of world development. Of 160 currently used pesticides we produce only 45, and these are mostly preparations that are virtually outdated and of reduced efficacy. In a number of cases our agronomists in plant production are left to the mercy of the weather! Measures taken in sowing procedures and dividing certain crops into zones cannot be permanent solutions. We lack preparations for potatoes and to protect grapevines... This is also the reason for the shortage of good quality potatoes from domestic production. Our domestic chemical industry provides us with a limited selection of protective agents and those are of low efficacy. Efficient imports are used only for propagation acreage.

On the other hand, when it happens, as in the case of the Research Institute of Agrochemical Technology which developed an excellent effective preparation against mealy moths in fruit trees (a small amount is produced by Chemika Bratislava) they claimed they could not find a manufacturer for larger quantities... just as though no one were interested.

Editor: The situation will probably not change from day to day. We must expect that chemical protective preparations against plant diseases and parasites will be in short supply, of low efficacy (those of domestic production) and in a relatively narrow range of selection. What can be done to eliminate the unfavorable consequences resulting from the shortage of pesticides?

Engr Frantisek Richter: The point is that the experts, of whom there are already plenty working in our agriculture, should know how to direct all their efforts against diseases and parasites in the most effective way possible. We must substantially improve and make use of the signaling network that reports the outbreak of diseases or parasites in any given agricultural locality. The signaling stations are equipped with the most modern facilities so that by making full use of the information immediately in the initial stage we can eliminate any noted outbreak of plant diseases or parasites. Thus, we can also save a considerable amount of pesticides. Of course a lot also depends on the protection specialists' being able to safeguard the plants effectively and in time by making the right selection and combination of existing chemical preparations available to us. For example, with a combination of specific synthetic fertilizers (liquid DAM-390) we can successfully work on the structure of the soil, as well as exert an influence on the protection of the life environment. If we can succeed in handling the entire problem of protecting plants, including the above-mentioned initial procedures, this could amount to an annual income for all plant production of about 2 to 3 billion korunas more from the increased production.

Academician E. Spaldon: The world has shown that agriculture prospers wherever the domestic industry produces the agrochemicals mentioned. We all know that this kind of chemical production puts great demands on raw materials, technological equipment and technical skills of people. I see the solution in intensified collaboration within the CEMA countries. I am not saying anything new. There is a document on specialization in the production of pesticides here (of a certain narrow range) and material is in preparation on implementing the Agro III program within the framework of CEMA. The point is that a defined, selected network of chemical enterprises should produce pesticides in large quantities for the agricultural requirements of all participating CEMA countries. I believe that our economists and chemists should seriously reappraise their production programs.

Engr Anton Jantula: The situation is very complicated, but not all that bad. Unfortunately, in the matter of chemistry--since we are not concerned merely with production for agriculture--we have had to make room for the solution of other urgent tasks. That is why we did not get the funding to implement the Agro III program which was then completely sidetracked. We are not giving up on it as seen in the fact that we have submitted several alternative proposals to responsible authorities to rework the whole Agro III program from several aspects. Our initiative, however, has only reached the ministry and not any farther...

Also the new preparations which will close out the investment operation of Agro II in 1983 will then be virtually outdated. These will also include the requested Fademor against mealy moths.

The introduction of new preparations in today's situation is closely tied in with another problem--the importation of raw materials, mostly from capitalist states which, naturally, makes production more difficult. And there is the fact that CHJZD in Bratislava, where the whole production of chemical preparations is concentrated, is now practically within the city and we have come up against the problem of a clean environment. At the same time we would be able to build new capacities here for half or a quarter of what it would cost in other parts of Slovakia. We are also not giving up on cooperation with the USSR from which we would import part of the raw materials, but our Soviet partners are insisting that we build up a certain raw material base here too. However, that represents about Kcs 500 million...I emphasize that, even though we have failed to get this project into the Seventh Five-Year Plan, we are not giving up on it.

Editors: In spite of the facts as stated could you tell us how much the production of pesticides will actually increase here and how much more of them the farmers will actually get?

Engr Anton Jantula: In the course of the Seventh Five-Year Plan, including increased production, we will supply farmers with about 4,600 tons of chemical protective preparations from domestic production which, however, (together with imports!) covers about 30 percent of the requirements of agricultural work. And within the framework of Interchim, which essentially represents the cooperative ties among CEMA countries in the production of chemical protective preparations, we can claim only as many preparations as we provide our partners to cover their requirements...

Engr Jozef Hudroch: Within the framework of the essential Agro III program, which has now been deleted from the Seventh Five-Year Plan and postponed, we were to produce enough of certain important chemical preparations to meet our own needs and still have enough remaining for export or for exchange for another so that we would not have to produce the whole assortment at home. After all, we agronomists are also primarily economists. So we believe that it pays us to invest in chemical preparations, even importing them, if we know that for each dollar expended we will save at least three in the importation of wheat or corn for feed mixes.

We will, however, obtain four new preparations, but only in the fifth year of the Seventh Five-Year Plan, so that again we will be dependent on imports, which is a very costly game...

Editor: In this situation could not the farmers also help out by using traditional methods, not only chemicals, in fighting against plant parasites and weeds?

Academician Emil Spaldon: The struggle against plant diseases and parasites must be part of a comprehensive agrotechnology, an integral part of plant protection. The emphasis, however, must be placed on the level of application of chemical preparations. That means that we must manage to discover in time and eliminate focal points of diseases, that we must discover in time the appearance of this or that parasite, and that we must manage to prevent its spread by the effective application of the right preparation at the right time. When we manage to do this our fruit will not be wormy, it will not contain any trace elements of chemicals

and we will be able to bake wholesome bread from good quality wheat. Precisely in those places where we find a high standard of agrotechnological concern we also find high quality plant cultivation (few weeds or parasites) even under the current difficult pesticide supply conditions.

* * *

Editor: The demands on chemistry also from other branches of the national economy are substantially higher than it can satisfy in its present state. But not even in the future will it be able to keep pace with the needs of its customers. The Seventh Five-Year Plan does not envisage as rapid a development of chemistry as we have known heretofore. The limiting factors are not only the investments mentioned, but especially the availability of raw materials...Therefore it is absolutely necessary to manage some other way. When the renowned Russian chemist Mendeleev compared the burning of oil with the burning of banknotes we laughed at him. Today we finally understand him, but nevertheless we utilize a high percentage of this basic chemical raw material precisely for purposes of energy. It is the same with natural gas, an important raw material for the production of fertilizers...So the chemical industry can itself help solve the problem of agrochemicals--at least in part, but not insignificantly--by extension: better evaluation of raw materials...

Agriculture, however, must recognize the present capacity of chemistry and adjust to it. It must not regard chemistry as its salvation and then forget about the tested traditional forms of fertilizing and attention to the cleanliness and cultivation of vegetation, the struggle against weeds and parasites by traditional standard methods, even though today we no longer really have the people to do hand weeding of corn or beets or to pick off bugs (potato beetles). But pesticides can be utilized more judiciously, more efficiently. We can detect the presence of weeds and parasites in time and listen to the voice of the signaling centers...and also insist that the mechanics finally come with the proper application equipment. The same applies to fertilizers (especially liquid) and also pesticides...With the combined efforts of all interested persons (and these are not just chemists and farmers) we must build up and make better use of the agrochemical enterprises so that their services will reach a high level and cover substantially more than the present 12 percent of Slovakia's agriculture.

There is no quarrel among agronomists and chemists about the need for investment in agrochemicals. We would also be interested, therefore, in the opinion of the planning agencies. We have had no reply to the question why, from a society-wide viewpoint, it should be better to be buying protective agents for plants from capitalist states than to invest in the development of our domestic production.

8491

CSO: 2400

GERMAN DEMOCRATIC REPUBLIC

WEST GERMAN ANALYSIS OF INVESTMENTS VS SUBSIDIES IN GDR BUDGET

West Berlin DIW-WOCHENBERICHT in German Vol 47 No 33, 14 Aug 80 pp 349-353

[Analysis by Maria Elisabeth Ruban and Heinz Vortmann, German Institute for Economic Research (DIW), West Berlin: "Subsidies Versus Investments--The Dilemma of the GDR State Budget." A translation of the Doris Cornelsen article on economic growth, cited in footnote 9, is published under the subheading, "Mid-Year Economic Status" (pp 24-35), as part of a series of articles compiled under the heading, "West German Commentaries on GDR Economic Situation," in JPRS 76755, 4 Nov 80, No 2060 of this series, pp 15-35]

[Text] Approval and control of the state budget are among the key functions of every parliament. The GDR People's Chamber, too, discharges this responsibility--at least formally. Every year in December, the People's Chamber passes the laws on the economic and budgetary plan for the following year. As a rule, the state's financial statement for the preceding period is submitted to the Chamber the following summer "for confirmation and for deliberation regarding discharge of the Council of Ministers."¹ However, this is preceded by the pertinent discussions in the budget and finance committee. In the People's Chamber plenum, the deputies are not provided with a great deal of information: Revenues and expenditures are lumped together in broad categories and there are no data as to where some of the funds came from or what they were spent on; in 1979, for example, this was true of 8.5 percent of the revenues and 18 percent of the expenditures. While the budgetary statements of the finance minister have been unenlightening for a long time, additional information could in the past be obtained from the (printed) commentaries on the budget. This year, the commentaries were not distributed in the People's Chamber,² but on the other hand the plan data for 1980 are more detailed, as compared to the hitherto customary practice. For important items, however, the delimitations have been changed to such an extent that comparison with the actual values of previous years is very difficult and in part even impossible.

State Share of GNP Increasing Again

During the 1971/75 Five-Year Plan, the revenues and expenditures of the state budget increased at an average annual rate of 10 percent, while the rate of overall economic growth amounted to over 5 percent.³ During the period from 1976 to 1979, overall economic growth and--to an even greater extent--the expansion of the state budget had been slowing down. With the exception of one year (1976), however, the growth rates of the budget still exceeded those of the national income (annual increase, %):

	1976/79 ¹⁾	1976/78 ¹⁾	1980 ²⁾
1) Nationaleinkommen	8,4	4,2	4,8
2) Staatshaushalt	10,2	8,5	10,8

¹⁾ Fünf- bzw. Vierjahresdurchschnitte. - ²⁾ Plan.

Key:

1. National income

2. State budget

Footnotes in the Table: 1) Five- or four-year averages. 2) Plan

Thus, through structural planning and wage guidelines, the state not only is instrumental to the generation and distribution of the national income; through its revenues and expenditures, it increasingly intervenes in the distribution process. In the planned economy, the disproportionate expansion of the budget volume, which can be observed in many industrialized countries, is justified as follows: "As the advanced socialist society undergoes further development, the state budget assumes increasing importance."⁴

To some extent, however, the difference in the growth rates of the national income and of the state budget is attributable to price influences. The national income is measured in terms of constant prices, whereas the data concerning the state budget are based on current prices. For the first half of the 1970's, the price component is of secondary importance; the price fluctuations probably do not significantly affect the comparison of the development of the national income (real) and that of the budget volume (nominal). During this period, the state finances increased rapidly, at rates that were twice as high as those of the national income. For the most part, the capital was raised through increased levies on the state-owned enterprises.

During the period from 1976 to 1979, the development was different. The budget volume showed only moderate expansion and the difference between the growth rates of the state budget and those of the national income was reduced considerably. If the price effects are taken into consideration, the difference probably was even smaller. On the enterprise level, the prices have been rising since 1976; consequently, the growth rates of the national income would nominally be higher than the real rates published. One cannot rule out the possibility that in this phase the expansion of the state budget did not exceed that of the GNP. The relatively modest expansion of the state budget is likewise attributable to the price development. The price hikes on the enterprise level were not shifted to the consumers; rather, they were compensated by measures such as revenue waivers on the part of the state. In regard to expenditures, the above-average increase in the subsidies for industry and for consumer goods must again be attributed to increased material costs.

In 1980, the budget volume is expected to expand again by over 10 percent. Thus the old difference between the growth rate of the budget and that of the national income will be reestablished. Presumably, this great discrepancy is attributable not only to methodological differences (current vs. constant prices); rather, it appears that the hitherto prevailing revenue waivers are to be reduced. An indication to this effect is the change in the price policy on the consumer level: The prices of high-quality consumer goods—which after the increase in the prices of materials were included in the category of subsidized goods—are now generally

expected to cover the costs and yield higher profits and tax revenues. Already there are indications that these measures are effective: During the first six months of 1980, the retail turnover of industrial goods showed an unusually rapid increase (+ 9.3 percent).⁵ Presumably, this can to some extent be attributed to price effects.

Compensation of the Raw Materials Price Hikes

Even though the payments of the state-owned enterprises were subject to major fluctuations, they remained by far the most important revenue source of the state budget (over 60 percent). The irregular development is the result of various price compensation measures. Since 1976, the enterprises have been confronted with higher industrial prices. At first, these increases were restricted to raw materials and raw material-intensive products; subsequently, there followed semifinished goods and products of the first processing stage, and finally, in 1979, the wave of industrial price hikes reached the finished goods. Until the fall of last year, the consumer goods prices remained largely unaffected. Insofar as the cost increases could not be absorbed by the enterprises, they were to be compensated through reduction of the net profit payment and/or through reduction of the product-related levies (differentiated excise tax). If these amounts were not sufficient, the enterprises could draw on a price compensation fund. In the individual phases, these measures were applied in various ways. The net profit payment was the first item to be reduced (1976/77). Since 1977, the product-related levies have remained at the same level, i.e. here, too, the state is forgoing revenues. The price compensation fund was used primarily during the period from 1976 to 1978; in 1979, its volume was reduced by half. The industrial price rises now had reached the finished-goods level and this was reflected in a 50-percent increase in the subsidy for industrial consumer goods. This subsidy had been greatly increased as early as 1976, presumably owing to the increased cost of electric energy, gas and coal.

In the future, the state is not likely to continue regulating prices by forgoing revenues. As early as 1978 and especially in 1979, the net profit tax again showed a sharp increase. But it is conceivable that other factors were involved here: The profit situation of the state-owned enterprises may have improved and/or—as was the case in the mid-1970's—the profit share claimed by the state may have been increased. At any rate, the planned above-average increase in the budgetary provisions for 1980 is to be financed exclusively by greatly increased levies on the state-owned domestic economy. The compensation of price hikes,⁶ which is necessary now as before, will presumably be reflected in the budget expenditures—subsidies for the state-owned domestic economy. On account of the gaps in the 1980 plan, this cannot yet be substantiated with certainty.

As regards the other revenues—taxes, fees and dues—the plans for 1980 call for increases in accordance with the long-term trend. Upward deviations from this have in the last few years been observed exclusively in the bank payments, and in 1978, in the receipts of the social insurance system. The latter is attributable to the increase in the enterprises' rate of contribution (12.5 instead of 10 percent of gross wages or salary). In return, the enterprises no longer have to pay the wage compensation (difference between sick benefit and 90 percent of the net earnings) which previously they had to pay for a total of 6 weeks of the calendar year.

Revenues and Expenditures of the GDR State Budget (billion marks)

	1971-1975 ¹⁾	1976	1976	1977	1978	1979	1980
	Ist						Plan
EINNAHMEN, insgesamt 1)	96,3	114,7	117,6	124,5	132,6	140,6	155,4
Einnahmen aus volkseigenen Betrieben, 2)	54,9	70,5	(71,3)	(78,3)	(81,5)	9) 84,7	10) 111,4
darunter: Produktionsfonds- und Handelsfondsabgabe	11,4	13,3	14,3	15,5	16,0	16,8	.
Nettogewinnabführung	17,3	26,7	22,7	22,5	26,0	32,9	.
Produktgebundene Abgaben	25,3	30,3	33,8	34,7	35,3	35,0	.
Übrige Abgaben	0,3	0,3	6) (0,5)	6) (5,6)	6) (4,2)	.	.
Abführungen der Banken 3)	2,4	3,4	3,7	4,3	5,0	5,3	.
Abgaben der Landwirtschaft 4)	1,2	1,3	1,1	1,4	1,3	1,4	.
Einnahmen von Produktionsgenossenschaften des Handwerks und anderen Produktionsgenossenschaften 5)	3,1	2,6	2,6	2,7	2,7	2,9	} 12,7
Einnahmen von privaten Handwerkern und Gewerbetreibenden 6)	3) 3,9	2,4	2,4	2,4	2,5	2,7	
Lohnsteuer der Arbeitnehmer und Steuern der freiberuflich Tätigen 7)	4,6	5,3	5,5	5,9	6,2	6,6	
Gemeindesteuern 8)	0,5	0,5	0,5	0,5	0,5	0,5	.
Einnahmen aus staatlichen Einrichtungen (Bildung, Gesundheits- und Sozialwesen, Kultur) und Staatsapparat 9)	5,8	6,7	7) 6,2	7) 6,7	7,4	7,8	8,0
Einnahmen der Sozialversicherung 10)	10,9	11,8	12,2	12,7	14,3	14,9	16,4
Sonstige Einnahmen ¹⁾ 11)	9,0	10,2	12,1	9,6	11,2	13,8	.
AUSGABEN, insgesamt 12)	95,2	114,2	117,1	124,1	132,1	140,2	155,3
Forschung 13)	2,1	1,8	2,0	2,1	8) 2,3	8) 2,5	.
Investitionen in der volkseigenen Wirtschaft 14)	4) 3,4	.	} 6,7	} 7,1	} 5,7	} 5,6	.
Investitionen im staatlichen Bereich 15)	3,1	3,4					.
Verkehrswesen 16)	3,2	3,5	3,0	3,1	3,1	3,0	3,0
Subventionen für die volkseigene Wirtschaft 17)	4,4	5,0	5,9	7,0	6,5	6,3	.
davon: Produktgebundene Preisstützungen	.	5,0	3,8	4,2	4,5	5,2	.
Preisausgleichsfonds	.	.	2,1	2,8	2,0	1,1	.
Zuwendungen für die Landwirtschaft 18)	2,7	3,0	4,8	6,0	7,0	7,5	.
davon: für Investitionen, Investitionen, usw.	.	2,0	2,4	2,1	2,2	2,3	.
für produktgebundene Preisstützungen	.	1,0	2,4	3,9	4,8	5,2	.
Subventionen der Verbraucherpreise und Tarife 19)	10,0	11,2	13,1	13,5	14,2	15,7	16,4
davon: Nahrungsmittel	5,4	7,2	7,4	7,4	7,7	7,7	.
Industrielle Konsumgüter	1,0	1,2	2,4	2,7	2,9	4,4	.
Öffentlicher Personenverkehr	1,9	2,2	2,5	2,6	2,7	2,7	.
Trink- und Abwasserbehandlung	0,5	0,5	0,6	0,6	0,6	0,7	.
Reparaturen und Dienstleistungen	0,2	0,1	0,2	0,2	0,2	0,2	.
Wohnungswirtschaft und Subventionierung der Mieten 20)	.	4,3	4,6	5,5	6,2	6,7	7,1
Bildungswesen 21)	2,1	3,1	3,8	9,2	9,5	9,7	10,0
Gesundheits- und Sozialwesen 22)	6,9	7,8	8,2	8,6	8,9	9,3	9,5
Sozialversicherung 23)	19,1	21,4	22,2	24,7	26,5	27,4	29,4
Kultur und Sport (einschl. Rundfunk, Fernsehen, Erholung) 24)	1,7	2,4	2,6	2,7	3,2	3,4	3,4
Staatsapparat und Wirtschaftsverwaltung 25)	3,2	3,5	3,6	3,6	3,6	3,7	3,7
Kommunale Dienstleistungen 26)	.	.	.	.	0,8	0,8	0,8
Verteidigung 27)	8,3	9,6	10,2	11,0	11,6	12,1	13,1
Sonstige Ausgaben ¹⁾ 28)	5) 17,2	5) 29,2	21,4	20,0	22,9	26,5	.

1) Als Differenz ermittelt. - 2) Fünfjahresdurchschnitt. - 3) 1971 und 1972: Einnahmen von Betrieben mit staatlicher Beteiligung und Betrieben der privaten Wirtschaft; Rückgang der Einnahmen nach Überführung der industriell produzierenden Betriebe in Volkseigentum 1972. - 4) Durchschnitt der Jahre 1971 bis 1974. - 5) 1975 einschließlich Investitionen in der volkseigenen Wirtschaft. - 6) Planansatz. - 7) Ohne Einnahmen aus dem Staatsapparat. - 8) Einschließlich Mittel für gesellschaftswissenschaftliche Forschung. - 9) Ohne übrige Abgaben. - 10) Einnahmen aus der volkseigenen Wirtschaft.

Quellen: Haushaltsrechnungen für die Jahre 1971 bis 1979 (Anlagen zur Volkskammerdrucksache der DDR) sowie Staatshaushaltsplan für das Jahr 1980.

Key:

1. Total revenues
2. Revenue from VEB, combines and VVB, including production fund and state fund tax, net profit tax, product-related payments, other taxes
3. Payments by banks
4. Payments by the agrarian sector
5. Receipts of production cooperatives of tradesmen and of other production cooperatives
6. Receipts of private tradesmen
7. Employee wage tax and income tax of self-employed individuals
8. Municipal taxes
9. Revenues from state institutions (education, health & social services, culture) and from the state apparatus
10. Social insurance revenues
11. Other revenues
12. Total expenditures
13. Research
14. Investments in the state-owned domestic economy
15. Investments in the state sector
16. Transportation sector
17. Subsidies for the state-owned domestic economy, including product-related price support, price compensation fund
18. Agricultural subsidies, including subsidies for soil improvement & investments, and subsidies for product-related price support
19. Subsidies for consumer prices, rates and fares, including food-stuffs, industrial consumer goods, public passenger transport, drinking & waste water treatment, repairs & services
20. Housing administration and rent subsidies
21. Education
22. Health & social services
23. Social insurance
24. Culture & sports (incl. radio, TV, recreation)
25. State apparatus & economic management
26. Municipal services
27. Defense
28. Other expenditures

Footnotes in the Table: 1) Established on the basis of the difference.

2) Five-year average. 3) 1971 & 1972: Revenues of partly state-owned enterprises and of private enterprises; decline of revenues after transfer (1972) of the industrial enterprises to state ownership. 4) Average for the period from 1972 to 1974. 5) 1975 incl. investments in the state-owned economy.

6) Plan target. 7) Excluding revenues from the state apparatus. 8) Incl. funds for sociological research. 9) Exclusive of "Other Expenditures."

10) Revenues from the state-owned economy.

Sources: Budgets for the period from 1971 to 1979 (supplements to the GDR People's Chamber Document) and the State Budget Plan for 1980.

Investment Share Decreasing--Subsidy Share Increasing

Since the delimitation and classification of the budget expenditures varies, not all items can be fully observed in all their successive developmental stages. However, by establishing broad expenditure categories, one can gain insight into the structure of expenditures and perceive the changes effected.

In the present categorization, the investment expenditures comprise all budgetary appropriations for research, for investments in the state-owned domestic economy and for the transportation sector. These expenditures are the only ones that over the last 4 years have shown an absolute decrease; their share was reduced by more than one-third. However, these figures reflect only a certain percentage of the total expenditures on the aforementioned projects: The investments in research and development are for the most part financed from the enterprises' own capital resources. While the budgetary appropriations for these projects amounted in the last few years to M 2 to 2.5 billion, the overall expenditures were three times as high (1978 = M 6.5 billion; 1980 plan = M 7.6 billion).

Structure of Budgetary Appropriations

	1971-75 7) in Mrd. Mark	1976-79 8) in % der Gesamtausgaben	1971-75 8) in % der Gesamtausgaben	1976-79 8) in % der Gesamtausgaben
Ausgaben insgesamt 1)	85,2	128,4	100,0	100,0
davon: 2)				
Ausgaben für investive Zwecke	11,8	10,3	12,4	8,6
Subventionen 3)	20,8	32,6	21,8	25,4
Traditionelle 4) Staatsausgaben	27,3	36,3	28,7	28,3
Sozialversicherung 5)	19,1	25,2	20,1	19,8
Sonstige 6) Ausgaben	18,4	24,0	17,2	18,7

1) Fünf- bzw. Vierjahresdurchschnitte.

Key:

- | | |
|---|----------------------------|
| 1. Total expenditures | 5. Social insurance |
| 2. Including: Expenditures on investments | 6. Other expenditures |
| 3. Subsidies | 7. Billion marks |
| 4. Traditional state expenditures | 8. % of total expenditures |

Footnote of the Table: Five- or four-year averages

As regards investments, the difference is even greater. The total investment volume presently amounts to approximately M 50 billion, with direct state participation constituting a relatively small share of this total. According to the plan for 1980, the total investment volume--inclusive of foreign investments--is not to exceed the level of the preceding year (M 52 billion⁷). Nevertheless, it is remarkable that in the face of restricted budgetary means cutbacks are made primarily in investment expenditures.

The subsidy category comprises economic stimulation measures and retail price subsidies. The economic stimulation measures are intended either to improve the production conditions (e.g. in the agrarian sector by means of soil improvement) or to compensate the losses that the enterprises would incur as a result of a refixing of industrial prices. Thus these are measures aimed at promoting production, which must be distinguished from the subsidies for retail prices, rents, fares, etc. that directly benefit the consumers; in many cases, they cover a substantial part of the actual costs and thus help to ease the financial burden on private households. For example, the total rent receipts cover only approximately one-third⁸ of the day-to-day maintenance costs of the housing sector; most of the costs of the municipal housing administrations are covered by the state budget.

In the GDR budget as well as in the budgets of the other socialist countries, the state subsidies for production and consumption are assuming greater and greater importance. In the breakdown by use criteria, this item is the only one--aside from the share of the remaining "other expenditures"--that has increased its share in comparison with the preceding five-year period.

It is especially against the background of the decline in investment expenditures, that the development is remarkable. The subsidy share--which in the preceding five-year period was nearly twice as large as the share of the appropriations for research, transportation and investments--is three times as large in the present four-year period.

The category of "Traditional State Expenditures" comprises all of the funds, by means of which the state maintains public institutions. In this category, one finds the expenditures on education, health and social services, cultural institutions, administration, defense, and communal services. This category has more or less maintained its share of the total expenditures. According to the plan for 1980, the subcategory of "Defense" (it comprises both defense and public safety expenditures) is to expand at a greater rate. The increase (M 1 billion) is twice as high as that of the two preceding years--an expenditure jump, to justify which reference is made to the aggravation of the international situation.

The social insurance funds are made up in equal parts of dues (of the individuals insured and of the enterprises) and budgetary subsidies. Their relative share of the state budget remains largely unchanged, while in absolute terms they have from year to year been increasing in varying degree. In 1980, the volume of expenditures will expand by M 2 billion (1979: + M 08 billion), which is primarily a result of the pension increase of 1 December 1979. This measure will significantly raise old age pensions and disability benefits, which so far have been averaging M 292 and which now will increase by 30 to 40 percent.

Nearly one-fifth of all expenditures is categorized as "other expenditures." No data are available in regard to the composition of this category. The fact that these non-itemized expenditures constitute such a large share naturally relativizes the informative value of the items specified, since it is not clear whether they are complete or whether they must be complemented by amounts hidden in the "other expenditures."

All told, the budget structure shows that as a result of the hitherto prevailing policy of subsidization the requisite mobility in the public sector has largely

been lost. While subsidies have been increased by billions of marks--through revenue waivers or through direct payments--investment expenditures have shown an absolute decline. If the price policy remains unchanged, this development is likely to continue--what with the continuous price increases in the world market. On account of the growth strategy-related significance of the infrastructure, this is disastrous even now. Since the SED leadership has always declared constant retail prices to be an integral part of a stable economic policy, a radical curtailment of the subsidization is not to be expected. But one can safely assume that in the GDR, too, it is realized that a short-term opportunistic policy of subsidization is bound to result in diminished growth and ultimately in a decline of the standard of living. An indication of this are the first cautious attempts to change the price policy on the consumer level and the changes in agricultural subsidies that are planned for 1981.⁹

FOOTNOTES

1. See GDR People's Chamber Document No 50/7, Election Period, 19 June 1979.
2. It is not known whether the deputies obtained them through other channels.
3. Overall economic growth measured against national income. In contrast to the GNP, the national income does not comprise all economic activities; services are for the most part left out of account. As regards growth rates, however, the difference between national income and GNP is negligible. During the period from 1971 to 1975, the GDR's national income increased at an average annual rate of 5.4 percent, and the GNP, at the rate of 5.2 percent. See Herbert Wilkens, "Comparison of the GNP of the GDR and of the FRG," DIW-WOCHENBERICHT, No 23-24, 1977, p 196; and GDR Statistical Yearbook for 1979, p 74.
4. Johannes Gurtz and Gotthold Kaltofen, "Der Staatshaushalt der DDR" [The GDR State Budget], East Berlin, 1977, p 20.
5. See NEUES DEUTSCHLAND, 12/13 Jul 80, p 4.
6. According to announcements, beginning in 1981 there will be annual price hikes in the energy sector. See GESETZBLATT DER DDR [GDR Legal Gazette], Part 5, 1980, No 18, p 165 and No 19, p 185.
7. In his report on the 1980 Economic Plan, Guenter Mittag quoted a volume of M 48 billion.
8. See BERLINER ZEITUNG, 27 Feb 79, p 3.
9. See Doris Cornelsen, "Good Growth Conditions in the First Half of the Year," DIW-WOCHENBERICHT, No 31, 1980, p 330.

8760

CSO: 2300

GERMAN DEMOCRATIC REPUBLIC

CROP, WEATHER REPORT PUBLISHED FOR DECEMBER 1980

East Berlin FELDWIRTSCHAFT in German Vol 22 No 2, Feb 81 p 88

[Article by Dr D. Krumbiegel, GDR Meteorological Service, Central Weather Bureau, Potsdam]

[Text] The Weather in December 1980

Markedly subnormal air temperatures in the first 10-day period were followed by very mild weather in the next two. The distribution of frequent precipitation was relatively even.

Up to the 8th, daily air temperature averages mostly ranged from 4 to 8 K, partly to as much as 11 K, below normal. Beginning on the 11th, there were hardly any longer subnormal air temperatures. The warmest temperature came around the 16th (+5 to 8 K), the 24th (+7 to 9 K) and at the end of the month (+3 to 7 K). In the first 10-day period, daytime maxima often remained below freezing (ice day). On the 5th, 7th and 8th, maxima failed to rise above -5°C widespread. The warmest weather periods (11th to 16th, 23rd to 26th, and starting with the 29th) brought in maxima between 5 and 10°C. Nocturnal ground temperatures during the first 10-day period often dropped to values between -10 and -15°C. There were a few days when minima around -20°C were recorded locally. In the second and third 10-day periods a total of nine nights remained free of frost widespread. Otherwise, except for the end of the second 10-day period (-5 to -10°C), frosts dropped only to -5°C. Duration of sunshine clearly was below normal, the last 10-day period getting the least sunshine.

Precipitation in the first 10-day period came down almost completely in solid form and led to a cohesive snow cover all through the GDR. Depth of snow in the northern plains came to from 10 to 15 cm, in the southern plains, from 15 to 25 cm, and in the mountains, from 25 to 90 cm. At the start of the second 10-day period it started to melt. Only the higher mountains kept their snow cover. The plains got more snow temporarily at the end of the first and the beginning of the second 10-day period. The rest of the precipitation came down as rain. Daily totals were relatively small. Regionally recorded were in the southern GDR on the 13th (5 to 15 mm), on the 15th (10 to 20 mm), on the 23rd (5 to 10 mm), and in the entire area on the 31st (around 5 mm), they being higher values.

Weather Data for December 1980 and for the Year 1980 according to the Chief Climatological Office, Potsdam

1. Monthly Air Temperatures and Deviations from the Norm

Station	December 1980		1980	
	°C	K	°C	K
Schwerin	1.7	+0.6	7.5	-0.9
Neubrandenburg	1.2	+0.8	6.9	-1.0
Potsdam	1.4	+1.0	7.9	-0.6
Erfurt	0.3	0.0	7.3	-1.1
Leipzig	1.2	+0.6	7.9	-0.6
Goerlitz	0.5	+0.5	7.2	-1.4

2. Average Precipitation according to Bezirke

Bezirk	December 1980		1980		+/- mm
	mm	%	mm	%	
Rostock	47	100	685	116	+ 93
Schwerin	53	106	733	120	+121
Neubrandenburg	37	84	650	115	+ 83
Potsdam	42	100	600	108	+ 43
Frankfurt	34	85	578	107	+ 39
Cottbus	46	110	648	111	+ 62
Magdeburg	44	110	585	107	+ 36
Halle	36	103	567	106	+ 34
Erfurt	42	89	637	101	+ 5
Gera	38	97	721	118	+112
Suhl	50	87	790	106	+ 47
Dresden	48	91	792	110	+ 69
Leipzig	40	96	669	111	+ 67
Karl-Marx-Stadt	46	82	860	107	+ 55

Soil, Crop and Labor

During the first 10-day period surface soil temperatures ranged around 0°C. Starting with the 11th, the ground warmed up temporarily, reaching its climax in midmonth with temperatures between 4 and 8°C. Then ground temperature fluctuations were recorded crossing the 5°C-limit on several days. Subsoil temperatures dropped during the first 10-day period. Then followed another rise until midmonth with relatively minor fluctuations subsequently. By the end of the month, temperatures at a 50-cm depth in the northern half ranged between 4 and 6, in the southern, between 2 and 4°C. At the 100-cm depth, values between 4 and 6°C were recorded in the same period. The ground remained frozen in the first 10-day period, from the 18th to the 21st, and in the southern bezirke also during some days in the last 5-day period, mostly for brief periods. Only in small areas did frost penetrate as deep as 10 cm. Ground water content was mostly around field capacity. In the southwestern plains, where there clearly still had been a ground water deficit at the beginning of the month, the ground water content increased. There, its

difference from field capacity down to 50 cm in depth ranged but between 0 and 25 mm, at a depth from 51 to 100 cm, between -20 and -70 mm. The high ground water content obstructed improvements in the soil structure. Instead, it favored increasing crowding. The second and third 10-day periods are likely to have brought shifts of nutrients in the deeper strata.

The winter crops were well protected from the frosts in the first 10-day period by the snow cover. It had a highly insulating effect, so that where there was snow on the ground, the temperatures recorded ranged only between -3 and -1°C. The subsequent mild weather caused the rest in the vegetation of the winter crop to be greatly stirred up. Nights free from frost and 6 to 8 days with average temperatures above 5°C permitted some growth and thereby improved the pre-winter development. Some considerable hardening is likely to have occurred at the same time, however. Together with soaked textures and a low cellulose concentration in consequence thereof, frost danger increased.

The winter weather at the beginning of the month stopped all field work. As the ground frost facilitated the trafficability of the acreages, organic fertilizer could be applied to the extent that snow depths permitted it. In the course of the second 10-day period, the digging of sugar beets, winter wheat seeding and winter plowing could be resumed under extremely difficult conditions. Wet soils called for a much great traction effort. Machinery and equipment came under the strongest stress. Losses in the sugar beet harvest and qualitative deficiencies in the ground working occurred. And then there may also have been considerable structural damage. The unusually strong and brief periodic air temperature fluctuations that had started late in October 1980 continued. Observing favorable climatic conditions for the storage of root crop and vegetables thus became extremely difficult. Whereas in the first 10-day period the very low daily temperature maxima hardly allowed an influx of outside air, subsequently, for a few days, even night temperatures were too high for cooling the goods in storage. For the potatoes, temperatures thus were mainly above optimum. For the sugar beets, rot was facilitated by the air temperature fluctuations, and due to continuing mild weather, respiration losses increased. The harvest crop got often very dirty, which reduced the effectiveness of aeration measures.

Meteorological Projections for Farming in February 1981

With the frost having had so much of an effect, the winter crop and forage acreages should be placed under control in order to catch possible wintering damage in good time. The high ground water content should induce us to see to it that the drainage equipment works.

5885

CS0: 2300

PROSPEROUS TSZs REVEAL PLANS FOR COMING YEAR

Budapest FIGYELO in Hungarian No 53, 31 Dec 80 p 11

[Article by Tamas D. Horvath: "Producer Cooperatives--What Are the 'Rich Ones' Planning?"]

[Text] At the end of December and the beginning of January even the directors of large-scale agricultural operations are already racking their brains over the tasks for 1981. Plan preparation has begun, but the drawing up of the 1980 balancesheet has not yet been completed, especially since because of the chilly summer and the sudden arrival of winter they have not yet been able to harvest all of the corn and sugar-beets.

Among the Best

We asked the directors of the Attila Jozsef and the Endre Sagvari producer cooperatives at Abonyi, the Uj Barazda at Lovasbereny, and the Uj Elet at Martonvasar about their 1981 plans. All four of the farms are classified among the best and fall within the "top" third of the cooperatives, and their situation is more favorable than the average, but nevertheless what the top-ranking producer cooperatives are planning is of interest to even the weaker ones. All four farms are of average size, farming 3-4000 hectares. The proportion of main activity is over 60 percent at Martonvasar, and over 80 percent on the other 3 producer cooperatives--therefore they are basically occupied with agricultural activity. The enterprise output per worker, however, is several times the national average.

A brief survey of this year's results is also necessary to lay the foundations for good annual plans. Wheat cultivation was successful in 1980: 55-60 quintals per hectare were harvested on all four farms. Sunflower cultivation was also profitable. The per hectare average was 18-24 quintals. The average corn crop was somewhat less favorable than last year. Seventy quintals per hectare were attained by the two Abony producer cooperatives, 60 at Martonvasar, and 55 at Lovasbereny. (The latter is the result of land quality that is substantially lower than that of the others.) The Attila Jozsef producer cooperative at Abony and the Uj Barazda at Lovasbereny succeeded in harvesting the entire corn crop by the middle of December; at the same time on the other two farms the crop was still standing on 150 and 120 hectares, respectively. In addition to this, the farms did not succeed in completing the fall deep-plowing: in the middle of December around 40 percent of this work was still undone.

In examining the credit situation of the farms, it is worth noting that the Endre Sagvari producer cooperative at Abony and Uj Barazda at Lovasbereny have no loan obligations, not even short-term ones. The other two producer cooperatives, too, only have minimal loans outstanding for, 3-4 million forints.

More Efficient Animal Husbandry

The development of animal husbandry figures in the plans of each of the large-scale operations. At Martonvasar they are renovating, at a cost of 30 million forints, a swinery turning out 5000 porkers per year. At the Sagvari producer cooperative at Abony a specialized cattle barn valued at 42 million forints for 640 head will be completed in 1981. These accommodations will partly replace the old, antiquated, scattered cow-sheds.

At Martonvasar and Lovasbereny they recently completed the construction of beef-cattle barns for 240 and 350 head, respectively, and making the utilization of 350 and 300 hectares of pasturelands possible. In 1981 the Attila Jozsef Producer Cooperative at Abony will construct accommodations for 300-head beef-cattle to utilize its 400 contiguous hectare pasture lands.

Closely related to the improvement of the efficiency of animal husbandry is cost reduction of fodder drying and storage. Virtually every cooperative is striving to do this, even if in different ways. The most successful is the invention of the Sagvari Producer Cooperative at Abony, where at the time of the big drying-shed construction campaign they abandoned the traditional barns and even now dry, where possible, using the sun and the wind, that is, for free. The Attila Jozsef Producer Cooperative at Abony commissioned the Energy Management Institute to make its drying installations suitable for burning agricultural by-products, the equipment for which the cooperative's machine shop would prepare. If this is not successful, even then they will heat with the substantially cheaper fuel oil residue instead of fuel oil. The Uj Barazda Producer Cooperative at Lovasbereny built a fuel-storage facility to store enough oil for a whole year, and thus buy a whole year's heating oil at the substantially cheaper summer season prices. It is characteristic of the size of the savings that they recovered the cost of the fuel-storage facility within a year and it is already resulting in a net cost reduction.

Each producer cooperative is experimenting with damp storage of corn. They have been using fodder stored in this way for cattle feed. An interesting initiative of the Lovasbereny producer cooperative is the mixing of the damp corn which they purchased from the Szekesferhervar dairy and feed this to the hogs with good results.

Small Changes in Plant Cultivation

The three most important elements of the sowing system on all four farms are wheat, corn, and sunflowers. Not a single farm wants to change the sown area of wheat and corn. Depending on availability, they would prefer to grow sunflowers on a larger area.

Characteristic of the cultivation strategy of the farms examined is [to have] either a crop surplus or savings. Either a crop surplus, or the same quantity of

crops produced at lower cost! This effort also motivates the directors of the Attila Jozsef Producer Cooperative, who wish to improve the efficiency of chemical fertilizer with the use of liquid fertilizer. In 1981 they will start construction of their dilution and mixing plant, where--by utilizing the experiences of the Babelna IKR [Industry-Type Corn Production System]--they could also eventually satisfy the liquid chemical fertilizer requirements of neighboring producer cooperatives. With this they could end the losses deriving from the superfluous and unequal spreading of chemical fertilizer, which are no longer insignificant given the use by the producer cooperative of 470 kilograms of chemical fertilizer per hectare.

At Iovanbereny they want to lower costs by changing soil cultivation. Where possible, instead of the fall deep plowing, they will graze the stubble, then burn it, and will only loosen and harrow the soil. This will not only lower costs, but will also prevent the soil from drying out. In addition to this, every 5-6 years they will spread manure on every field. This is needed for this not only for the sake of economy, but also because exclusive use of chemical fertilizer--as Iovanbereny is already experiencing--acidifies the soil. These changes will lower costs, and also increase yields, and therefore will be accompanied by a double benefit.

Development of Subsidiary Activity

In 1981 the Attila Jozsef Producer Cooperative at Abony wants to improve the recently established machine shop. The shop, set up with minimal expenditure, is proving to be profitable undertaking. The Martonvasar producer cooperative is also planning to improve its machine shop and construction brigade, partly to increase earnings, and partly to reduce costs. The costs of reconstruction of the swinery mentioned earlier would be much greater, if they were to be build by an outside contractor, instead of their own construction brigade.

The Iovanbereny producer cooperative is the only one where they are considering establishing a food industry side-line. The producer cooperative has already had a modern mini-slaughterhouse processing 800-1000 swine yearly. For the future they are planning to set up a meat-processing plant to process the 6300 porkers annually which are bred by the producer cooperative as well as the hogs produced by village household plots into pork sides and meat products. For the moment this undertaking appears profitable, but if this idea does not pan out, then they will contract with one of the industrial plants in nearby Szekesferhervar to handle the sideline industrial activity.

The producer cooperatives regard the development of the sideline operations as the appropriate means to "parry" the impact of the 1980, or rather, 1 January 1981, changes in producer prices.

8971

CSO: 2500

OTA SIK, 'PRAGUE SPRING' ECONOMIST, VIEWS POLISH SITUATION

Bonn VORWAERTS in German No 4, 15 Jan 81 pp 9-10

[Interview with Ota Sik: "Only Cynics Remain in the Apparatus"]

[Text] Ota Sik, born in 1919 in Pilsen, spent the years between 1940 and 1945--during the Nazi occupation--in the Mauthausen concentration camp. In 1945 he became a member of the Czechoslovak Communist Party (CPCZ), he studied economics, between 1962 and 1968 he was a member of the economic reform commission of the CPCZ. He developed a theory of market-controlled socialism and called it "Third Way." During the Prague Spring (April to August 1968) he was minister of economics and deputy president. Following the invasion by the Warsaw Pact, he emigrated to Switzerland. Since 1974 he has been Professor for Systems Comparison at the St Gallen Institute. His publications are: "The Third Way" (1972), "The Communist Power System" (1976), "Humane Economic Democracy--A Third Way" (1978).

VORWAERTS: Professor Sik, were you actually surprised by the movement and the changes in Poland?

Sik: To me it was not surprising at all. All the things that the Gierek regime did in recent years amounted to no less than a bureaucratic imposition on the people. They were putting together an enormous investment project; still, their intentions were good (fast modernization, fast technical development). But they were planning on such a large scale that they went beyond the capabilities of an economy. In 1976, Poland's investment quota, that is the proportionate share of investments, amounted to 35 percent of the national income. As a comparison: In Western industrial countries 10 to 15 percent is customary.

And when you add the fact that the national per capita income in Poland is almost 50 percent lower than it is in the FRG, you can see how relatively small the amount is that is left for consumption.

VORWAERTS: When Gierek took over the government in 1970, he pledged to raise the standard of living of the population. Why, is there now an investment quota of 35 percent?

Sik: What is behind it, naturally, is the goal to increase productivity rapidly. Because every economist knows that without a relatively fast increase in productivity the national income and with it consumption cannot be increased. The question remains, however, which is the fastest way to achieve an increase in productivity. And the Giersek regime thought that renewed state intervention would be the quickest way to force modernization, by simply planning large sums for investments and new machinery. Real increases in productivity, however, can only be achieved through technical improvements, through innovation. The quality of the entire technology must be improved to raise the output per worker. But you cannot accomplish that with a government-controlled planning system.

VORWAERTS: In other words, the system has a flaw which could not have been avoided by other politicians either?

Sik: Both. If the regime had not been so dogmatic, it would have had to come to the conclusion: We need more decentralization, more market impulses, a stronger interest on the part of enterprises. They did not do this but tried to outdo themselves by using the old means of planning. All the East Bloc countries have high investment quotas. But what was done in Poland--considering the initially poor economic situation--was more or less something that was specifically Polish.

VORWAERTS: Consequently, it was not an accident that the movement broke out in Poland and not, let's say, in the GDR?

Sik: There are many specific factors: the fact that the economic development in Poland has been lagging far behind, that the Poles have already tried several times to change things. Certainly, an important part is also the fact that they are saying: Actually, it is the dictatorship of the Soviet Union, we could have been living better for a long time. It is true. Naturally, it is combined with a rather old national hatred toward the Russians. And then there is the strong Catholic Church which supports the pressure for reforms.

VORWAERTS: And in the GDR?

Sik: Economic conditions are better. The GDR began on a higher level of development and, consequently, it was possible to establish a better production structure. There was the traditional chemical industry. Chemistry is producing fertilizer for agriculture, raw materials for the textile industry, synthetic materials etc. The industrial structure is simply more modern. For political reasons, there was probably also less pressure from Moscow to expand the heavy industry. Furthermore, I might add that the GDR is also profiting from the inner-German trade. And I would not exclude the fact that, on the average, the German is indeed a more industrious person....

VORWAERTS: Do you really mean that?

Sik: I do believe that this mentality is playing a certain role.

VORWAERTS: Perhaps it is the German obedience?

Sik: I was taking that into consideration, at least a little bit. He is more used to central instructions. Whatever comes from the state is holy. The German thinks a little bit more; in this case it is to his advantage. But there have also been a few rather effective reforms in the GDR.

VORWAERTS: Prague 1968 and Poland 1980, do you see any parallels?

Sik: The new thing is that in contrast to the Prague Spring this movement did not originate from within the party. In Poland all attempts at reforms within the party were suppressed. A markedly oppositional labor movement was formed outside the party. There is also an advantage to the fact that the labor movement has become so strong--it is not as easy to deal with as an intellectual movement.

VORWAERTS: What about the new Polish government? Is it not facing insoluble problems now: higher wages, bigger investments, more exports, less working time?

Sik: They should have the courage to reject quantitative growth through state-managed annual plans and find a way of creating a real interest by plants in profits. Profit sharing by employees, however, is only beneficial where you have, first of all, market prices and, second, genuine competition. As soon as consumers no longer have the possibilities of choice and have to depend at all times on a monopolistic giant concern, it will remain the master, as is the case with every monopolist. It will take the easiest way out. It will not put in any effort to produce more economically or to introduce better products. Why--because it knows that everything it produces is snatched up immediately, because consumers prefer to buy something that they do not need to nothing at all. In the CSSR, for instance, it has created a situation where stockpiles of unused goods are larger than the entire national income.

VORWAERTS: Should socialist plants turn into capitalists?

Sik: The issue is not capitalism. I do not equate market mechanism with capitalism. A market already existed before capitalism was functioning and, in my opinion, a market mechanism is also necessary within a socialist set of circumstances.

VORWAERTS: In your opinion, what are the chances for a reform in Poland?

Sik: There is no definitive answer yet, but I am afraid that the mere existence of an independent, free labor union is inconsistent with what the party leadership would be willing to tolerate. And now, when I think of the international pressure that has to be endured by the party leadership, it is likely that its goal will be to liquidate particularly those demands which are in contradiction with the so-called "leading role of the party."

VORWAERTS: In your opinion there is no way to establish pluralism under the cloak of the "leading role of the party."

Sik: That is not exactly the way I would put it. I think the possibility still exists. But I am now weighing things carefully--all my experiences from the past cause me to be somewhat skeptical. I am afraid that they will try to liquidate these things. But I did not say that it would have to be done. I believe there is a chance of something like a first step toward a certain democratization. That is really my biggest concern. There is still hope.

VORWAERTS: Is it not possible that a reformed system might also be attractive to the bureaucracy--whenever it starts to become effective?

Sik: Your question would be logical if these people were the kind who could think generously, if their most important concern were really the economy, its effectiveness, the needs of the people. But I happen to know what kind of people they are and I know the apparatus.

They would welcome it if everything were more effective, if the people were satisfied. But what is most important to them is preserving their own positions of power and the privileges that go along with it. After all, during the months of the Prague Spring we saw these people cry like little children when they noticed that they were going to lose their functions.

VORWAERTS: And what about the confirmed communists?

Sik: Well, you know, in all countries confirmed communists were always those who were in conflict with the times and who had to leave. The best generations, idealistic communists, if you wish, always turned into critics. It is the nature of this system that the cynics are the ones who remain within the apparatus.

VORWAERTS: Seen against this background, do you think there is a way--theoretically--for the party to live with a free labor union?

Sik: Yes, certainly. I can imagine that it is possible to agree on the goals of a macrodistribution plan. It is an economic plan that would only establish the large goals, how fast private consumption is to rise, public satisfaction of needs, investments. The goals of the plan could be put together by a number of commissions, and representatives from various interest groups should participate--representatives of the party, for instance, and "Solidarity," the labor union. And a democratic consensus should exist already while the plan is being put together.

VORWAERTS: And the leading role of the party would still be preserved?

Sik: That is a good question....We are always coming back to the same problem. I think the brother parties expect that such a pluralism will simply not be tolerated. You asked me whether I thought that theoretically it was possible. My answer to that is yes. But when I take into consideration the effect of the brother parties, naturally, the yes becomes rather faint. They are afraid of such developments. But it would not be a departure from socialism.

It would be a kind of socialism where planned goals are democratically established. What is needed in addition to these planned goals is something like a functioning market mechanism. A wise leadership in Hungary is trying to follow this path, although it is not drawing the proper conclusions and permitting pluralism. It is the compromise with the old system: They are trying to implement certain economic reforms, but they do not want to touch the leading role of the party.

VORWAERTS: Does this situation provide a recipe for the foreign policy of the FRG?

Sik: In general, I am an advocate of detente, I am in favor of intensive economic, cultural and tourist relations. Because I am always proceeding from the idea that only the people in the countries themselves can make changes. And intensive information is supporting this idea.

But the policy of detente requires that one pursues goals, helps reform developments, in other words, it must be a discriminating policy of detente. Even if Stalinists are in power I must negotiate with them, but I must know with whom I am negotiating.

And I must make it perfectly clear to the other side that our goal is not only to preserve democracy in the West but also its victory in the Eastern world. In the long run it will not be possible to maintain peace without democratization.

VORW/ 1000: At the present time, however, there is less danger in the West of an indiscriminate policy of detente than of a new confrontation, including the tolerance of undemocratic developments in its own camp.

Sik: You are right, I am aware of this danger myself. I know that the hawks on both sides are increasing their animosity toward one another. Do not misunderstand me: As far as I am concerned, democratization in the East is always democratization in the West as well.

8991

CSO: 2300

ECONOMIC REFORM FACES DIFFICULT, UNIQUE CONDITIONS

Warsaw DZIENNIK LUDOWY in Polish 29 Dec 80 pp 1, 3

[Interview with Dr Stefan Jadrychowski, member of Economic Reform Commission by H. Lewandowska]

[Question] Doctor, you are the head of the team and the commission that is supposed to deal with, and is already dealing with, the organizational structure of our economy. This is not a new field of endeavor for you. Several years ago you were the chairman of the Planning Commission at the Council of Ministers. As a state and party official you have many times had an occasion and an opportunity to influence economic decisions which bear directly on the fate of the country. This is not the first time that an attempt to reform our economy has been undertaken. After October 1956 the Economic Council was created, but it died a natural death....

[Answer] A natural death is the result of disease, of the internal state of an organism. The death of the Economic Council, on the other hand, was managed from the outside. This council worked out a plan for changes in the system of management and planning and this report was rejected without any discussion by the then first secretary of the PZ (Central Committee. Shortly thereafter, the Economic Council was disbanded, although public opinion was not informed about the decision.

[Question] What did the Economic Council propose at that time? What were its recommendations for curing and improving the economy?

[Answer] First of all, the plan assumed increased independence for the enterprises. I would like to say that in the work of the present Economic Reform Commission we are returning to that very idea. Naturally in another manner, because conditions have changed and the state of our economy is now different--in a word, a great deal of time has passed. Still, it is not a return to the Large-Economic-Organizations Reform, which had other assumptions.

[Question] Here we are already returning to the seventies....

[Answer] That reform, likewise never fully realized, was based upon large economic organizations, and the attempt to undertake the reform was carried out during the years 1973-1975. Federations or other large economic organizations were supposed to be the subject of economic activity.

[Question] The independence of the enterprises appears to be an excellent solution, though the evidence from Yugoslavia permits one to doubt an economic miracle set upon that basis. Aren't you apprehensive about Polans's taking such a risk? Or don't you think that in the situation in which we now find ourselves we should first move off bottom and only then take up reform?

[Answer] That is precisely the great dilemma facing the entire commission and also the government. There is no doubt that this is the worst time to introduce reforms into the system of planning and management. Hungary, for example, introduced a similar reform during a period of firm stabilization of the economy. There was equilibrium at that time in the internal market and the balance of payments abroad was also relatively equalized. The reform of that time thus had a chance for success and could promote reinforcement of the developmental tendencies of the economy.

We, on the other hand, are in a situation in which the equilibrium of the economy has been greatly shaken, both in the market, which is connected with the huge inflationary gap, and in the balance of payments abroad. The same also applies to investment activity and to industrial supplies of raw and other materials. It seems to me that in order for the reform that has now been prepared to come into play fully we should first deal with the problems mentioned.

[Question] But can we wait?

[Answer] Public expectations are high and maintaining the existing state of affairs in planning and managing the economy would also not be able to solve anything.

[Question] What next? Compromise?

[Answer] I would say the actions are parallel. In actuality, leading the country out of a condition of deep imbalance is a question of social and economic policy, since it was a misguided social and economic policy that brought the country to this state. The government is working on how to cope with this vital matter. The commission has other tasks.

[Question] You are ducking the issue, as do some officials of the new trade unions, who postulate that the government should give and apportion. The task of the unions, on the other hand, will be to check and to critique.

[Answer] What can the commission do, since it does not even have such full powers?

[Question] Is the task of the commission, then, to present a plan for comprehensive reform?

[Answer] That is its principal task, although the government is also asking the commission to solve immediate questions, for example, to reduce planning to the next year, to simplify the economic and financial system of the State Farms, etc. But that is not the principal goal. The work of the commission will last 2 years at the very least. It is currently predicted that our recommendations and decisions will be put into effect as of 1 January, 1983. The next 2 years must be utilized to the maximum in order to lead the economy out of the imbalance we have been talking about.

[Question] Doctor, I should like to return to the past again. In 1968, after you had left the Planning Commission, reforms were planned whose principal slogan was to pass from an extensive economy to an intensive economy. What happened at that time to prevent its realization?

[Answer] That reform was badly conceived. It was limited in principle to introducing a so-called system of economic incentives into the enterprises. The system was too complicated and unintelligible to the working class--and as I recall--when it was first presented to the session of the Political Bureau, almost all the members said that they understood nothing. At that time, Comrade Gomulka pointed his finger at me and said: "Comrade Jedrychowski understands."

I understood just a little of it, but I did not agree with the concept. Returning to the merits of the matter, I would say that the system was so conceived that in the first stage they assumed a deterioration in the life of the working class, because it mainly concerned the industrial enterprises. Only in the long view did it create the possibility of improvement. The plan was thus adopted in a rather doleful frame of mind.

[Question] It seems to me, doctor, that the Poles are a nation inclined to self-denial. If the truth had been told, the whole truth, setting the date when things would be better, wouldn't they have been able to accept temporary sacrifices?

[Answer] At that time the situation was not such that it had to become worse. That system artificially created conditions of that sort. The idea was examined in the workshops. That worsened the matter still more. Afterwards, on the other hand, there was another attempt by the people to reject price increases.

[Question] After that we already had December....

[Answer] Yes. That was the direct cause of those events. Then they began to search for other solutions. The price increases for food were rescinded.

[Question] Let us go back still earlier. You were talking about the proposals of the Economic Council. Was there at that time a realistic possibility that the plan of that reform would be put into effect?

[Answer] I was one of the coauthors of the reform program at that time. I defended--and I say this openly today--certain strategic elements of central planning. The main investments--the distribution of the national income and the control of prices--those were the things which I was convinced had to remain in the hands of the state. The conditions for introducing reform existed, but the political conditions were lacking that would have permitted its realization.

[Question] Did we then lose some sort of opportunity at that time, we as a country, we as citizens?

[Answer] There is no doubt.

[Question] Let us return again to the idea of the Large Economic Organizations....

[Answer] This idea undoubtedly contained healthy elements but they were incomplete, not comprehensive. In order for reform to succeed, the political leadership must have good will in order to decide for its full realization and thus would have had to forego some of its own prerogatives, to relinquish direct management of the enterprises or still larger economic organizations. Precisely this type of will was manifested, e.g., by the leadership in Hungary, while in our country the attitude toward reform was half-hearted.

[Question] They wanted to, but there was too much opposition?

[Answer] That is the way that it was.

[Question] Will it be different with the reform currently planned?

[Answer] I hope so.

[Question] You mentioned that the work of reform would be finished in 2 years.

[Answer] Several of its elements, however, can be introduced into economic practice earlier--of course--these would not be incompatible with the overall directions of change.

[Question] Aren't you afraid that introducing the reform "by installments" could lead to even greater chaos?

[Answer] Judging from what the representatives of the government and the party leadership have said, the conditions will be favorable to carrying out the reform. Precisely that good will can be a guarantee of its realization, even if the implementation will be gradual.

[Question] What principal ideas are now guiding the Commission for Economic Reform?

[Answer] The division into 11 groups is a rather conventional one. No one of them can independently work out the overall concept. My team deals with the organizational structures of the economy. Nevertheless, it is impossible to plan them without considering the other important elements of economic and social life, e.g., the system of planning, the economic and financial system, workers' autonomy, etc.

[Question] Let's say a few words then about the basic direction of the overall reform.

[Answer] The basis of our considerations--along with the general instructions of the government--are, among other things, the plan worked out by a large group of members of the Polish Economic Society, the assumptions for reform included in the theses formulated by the secretariat of the commission with the participation of invited specialists, and also the plan presented by a group of researchers from the Main School of Planning and Statistics in Warsaw. The discussion in the commission teams enrich these propositions, and in addition we are receiving letters with suggestions, many of which are very interesting.

On the basis of these materials the teams have formulated their theses and a study has gradually been put together, obviously of a preliminary nature. Following

preliminary discussions it will be brought to a plenary session of the commission. Then it will be published and made available for broad public discussion.

[Question] What principal postulates can the plan include?

[Answer] The basic assumption is the creation of a system which will assist in meeting the needs and the expectations of the people and in developing the economy.

[Question] That is the goal?

[Answer] Yes. The means for realizing it should be, however, a departure from a directive-command system to a broadly understood autonomy for the enterprises, and thus their independent planning and self-management.

The central plan will deal only with the problems defined as strategic. It should not, however, include excessively specific directives and orders for the enterprises, though--naturally--in the transitional period the maintenance of firm directives and limits will be necessary.

In the future, however, its effect upon the enterprises should be exercised exclusively by the use of economic instruments such as changes in the distribution of the income of the enterprise, the bases for the formation of capital, credit policy and prices.

[Question] Prices then should be regulated generally....

[Answer] That is a condition for setting the entire economy in order. However, one can point to the fact that Hungary carried out its reform without prior resolution of the question of retail prices. They changed them in the course of the reform, making suitable compensation and spreading the reform over several years.

The intention of our Polish reform is likewise to truly simplify our organizational structures. Definitely there must be fewer levels of management. On the other hand, we foresee that sufficiently great freedom must be left to the enterprises to enter into voluntary associations in order to carry out the tasks set. We are likewise thinking of proposing a decrease in the number of branch departments.

I think that several other organizational structures should also be revamped. I have, for example, water management in mind.

[Question] The commission is quite large, with people representing a variety of views....

[Answer] In the first stage of work that is precisely the way it should be. Later, small groups will be operating which will reanalyze the outcome of the broad discussions and give the final form to the plan.

[Question] That, however, will prolong the road to completing the reform.

[Answer] One obviously has to pay a price for democracy. A project that takes a longer time, however, does not indicate worse results. Rather just the opposite.

[Question] Are you optimistic?

[Answer] If I were not, I would not have taken part in the work of the commission. Surely no one likes to work in an idle venture. However, I do see many obstacles and many difficulties. Excessive expectations and also mistrust accompany our efforts. There is in this something of the fact that this time the people do not wish to place their confidence fully in the propaganda of success and now, unwillingly, they have become aware of the fact that things are as bad as they really are.

[Question] But then we have been muttering about this.

[Answer] That's right. If we had spoken about that in a firm voice earlier the workers' demands would surely not have escalated the way that they have in recent months.

3190

CSO: 2300

POLAND

SOCIETY RESEARCHER 'KAROL K' DOUBTS REFORM PROJECT SUCCESS

Copenhagen INFORMATION in Danish 17-18 Jan 81 p 3

[Article by Vibeke Sperling: "Polish Reform Project Requires Profound Changes in Political Power Structure"]

[Text] The Polish reform committee has just published an economic reform project, the implementation of which requires the abolition of the power monopoly of the central authorities. "The battle in connection with the wordings of the reform project has been won," says Polish society researcher Karol K (pseudonym) with whom INFORMATION has discussed the consequences of the reform project.

Progress in Poland has been blocked by an autocratic display of power and the lack of adjustment to the realities of the present. A body of economic reforms, combined with fundamental changes in the political system, therefore, is necessary. This is one of the conclusions at which the Polish 'Committee for the Preparation of the Economic Reform' has arrived after 3 1/2 months of work.

The reform project has just been published and issued in 500,000 copies as an enclosure to the party organ TRYBUNA LUDU on Monday, 12 January 1981. The preparation of a sweeping economic reform is part of the so-called Gdansk accords, which were concluded between the government and the union federation Solidarity after the strikes of the summer.

The project now presented is "a very sweeping reform project," says the Polish society researcher Karol K. "Another thing is whether it will be possible to implement it."

The project itself has taken that problem into account, seeing that it has been stressed in several places in the reform project report of 78 pages that it requires "the acceptance of the society," which means the active cooperation of the central classes and strata of the Polish society. The radical nature of the project may be deduced from the close linking of the economic reform with political changes. Its implementation requires overcoming "the inertia of the conservative forces as well as the solid support of the working class."

Attack on Power Structure

The reform project works directly with the qualitative new processes within the trade union movement, with the existing trends toward self-government, and with various forms of the cooperative system in agriculture. The development of these is expected to create the possibility of breaking through the old structure.

A comparison between the earlier reform project drafts and the end result shows that it is not too easy to break through the old power structures. Previous drafts openly worked with the abolition of large sections of the existing bureaucracy. The final reform project report does not contain any precise wordings in this respect, but the implementation of a number of the concrete proposals will render superfluous many hitherto existing bureaucratic links.

"Although this aspect has been toned down in the final reform project report, there is no reason to believe that the idea of reorganization of the bureaucracy has been abandoned," says Karol K, adding: "but this is an extremely sensitive point, even to many members of the committee who themselves belong to the upper or medium-level party and state bureaucracy. They, of course, know the interests of their own strata. To the driving forces within the reform project committee, there is, moreover, good reason to proceed with caution, for the implementation of the reform project depends ultimately upon 'the social participation.' For it is no legislation with which they are being presented.

Unemployed Bureaucrats

It is not possible to state in precise terms how many bureaucrats the implementation of the reform project would render unemployed. In Poland, no precise accounts exist from which it may be deduced how big the 'apparatus' actually is. As in the Soviet Union and in other Eastern European countries, it is here a matter which seems to belong under state secrets. An article in the West German DIE ZEIT refers to the "entire apparatus with its approximately 200,000 employees" (C. Schmidt-Hauer: "Poland: In the Middle of the Storm," 26 Dec 80). This, however, can only have been based on an estimate.

Karol K takes strong exception to Schmidt-Hauer's conclusions concerning the Polish reform efforts. Schmidt-Hauer merely says that there are really radical ideas in one of "the many long-term reform proposals," resulting from the work of various groups and committees. According to Schmidt-Hauer, only the proposal from "a group of young economists" (the group which prepared the schematic presentation of the miserable state of the economy, shown in this article; editorial staff) involves changes in the central power apparatus. "The cautious reform proposals from the government committee which are scheduled to be presented in a few days do not anticipate any reform of the central power apparatus," Schmidt-Hauer writes.

"It is extremely important to draw attention to the erroneous impressions which several media in the West had received before seeing the result of the work of the government committee," says Karol K, adding: "One has got to have

studied the earlier material and the reform project which has now become available very poorly to overlook the fact that the change in the power apparatus itself is the very crux of the proposal."

Self-Administration

A glance at the reform project's list of economic virtues which every country would like to possess, will reveal the existence of these problems. For what is essential here are not the fine objectives but the means which, in the opinion of the committee, will have to be employed. The relationship between, on the one hand, the central authorities and, on the other, the local authorities will have to be changed totally. The independence of the latter will have to be increased radically in the direction of self-administration. Schematically, this may be expressed in the way that the individual enterprise from being subject to a vertical system becomes a link in a 'horizontal system.' The power will have to be 'levelled out.' In practice, this will involve the abolition of the many links, leading to the ministries responsible. The enterprises are no longer to be governed from above but will determine 'their own economic success.' Profits are to play the role of indicator which demands from above have previously been playing--or attempted to play.

The result of the committee on this plane is, and has for many years been, the focal point of the debates among Polish and East European economists and social scientists. Even today, many would like to find an intermediate form between the traditional 'command system' and the market as regulator. This has in previous reforms been reflected in the choice to make profits, among other things, an indicator.

The reform project which has now been presented seems to be an expression of the attitude that 'no compromise exists.' A system must be developed where the responsibility is vested in the individual enterprise, and the survival of the enterprise depends on its success in the market. It will have to be measured with the actual consumer demands. The enterprise is to be provided with a board of directors which, together with the workers' council "elected by the workers from among the workers," will manage the enterprise. Self-government and self-financing are the key concepts.

Struggle Ahead

"Another thing are all of the legal steps which, later on, will have to be taken to implement it," says Karol K. "That struggle is still ahead of us, but the first battle in connection with the formulation of the solutions to the key problems has been won with this reform project."

There are fears among Polish reform politicians and economists that the wordings are not binding enough. As mentioned above, it is not an act but a work document. One of the decisive problems in this context will be the existing shortage of raw materials. "The whole thing may collapse on account of this problem. For a change within the central government also means a change of the earlier centralized distribution system," says Karol K. "Whether or not there has been a shortage of raw materials, the central distribution system has never worked. And the philosophy behind the reform project is that also the distribution of the raw materials must be regulated and fought out among the enterprises."

It is not indicated in the reform project report, but the implementation of the reform project cannot but mean the closing down of, for example, a number of trade ministries which, far removed from the individual enterprise, have hitherto had the decisive word.

We here seem to be faced with a project which attacks the very core of earlier Polish (and Soviet as well as other Eastern European) planning. "It has been proposing objectives to itself centrally without acceptance on the part of the population, and without the population having been informed of alternatives," Karol K says.

"This has meant that nice 5-year plans have been implemented in the form of entirely different 1-year plans, which, in turn, have been disrupted by what the reform project report refers to as "voluntaristic ad hoc maneuvers." The differences have often become so big that "even the power apparatus has not been interested in the big differences between the objectives and practice." It has also meant that indications of maladjustments in the economy have been noticed too late, have been looked into too late, or have been concealed by the government "until even the sparrows started talking about it," as Karol K put it.

Plan and Self-Administration

The reform project does not reject plans but demands that the superior plan express an actual "development strategy" which can be realized, that it reflect the actual needs, the actual capabilities of the individual enterprise, and, as a crucial point, that it be based on the "acceptance of the society."

At a first glance, it seems like a contradiction that the reform project requires self-administration and, at the same time, a strengthening of the 5-year plans. On this point, Karol K says: "There is no contradiction as long as a system is required where self-government and plan become a coherent system. The reform project requires a change in the pseudo-administration previously undertaken by the planning authorities. They have literally been involved with even the smallest nut in each individual enterprise.

The reform will ensure that they actually do their planning on a realistic basis and on the basis of the self-administration of the enterprise. And that they will be deprived of the power to intervene the way they have done before, and that an end will be put to all the incredible red tape which previously has made it impossible to get the time for any real planning work.

Neutral Supervision

According to the reform project, the Planning Committee, the Central Bank, the Department of Statistics, and the Ministry of Finance must, in the future, see to it that all links within the economy be supervised and must ensure early intervention in case of maladjustments. This also means supervision of the individual enterprise, which will be "subject to the existing legislation," not to "commands." When the central power administration is eliminated,

the above bodies will be the guarantee of the society that no swindling will take place, and that the enterprise is managed in the interests of the society. The crux of the matter is that neutrality must be ensured, that supervision and registration must take place through independent expert and research institutes, and that their results be available to everybody. "The intention is a system which eliminates the backgrounds to the flattery and the distortion of facts which have often been the basis for passing on information and reports to the link further up the power ladder," says Karol K.

This is directly addressed to the very power center: the government. Throughout the times, it has not only reacted too late but also ineffectively. The inefficiency has especially been expressed in the decisions of the government to intensify the very means which have been the cause of the disaster: the centralistic administrative power structure.

Government: Rights and Obligations

According to the 'reform project,' the 'rights and obligations' of the government must be defined precisely. The purpose is to halt arbitrary administrative measures of intervention and arbitrary laws. This power is to be taken away from the government and vested in the parliament, the 'sejm.' "This is in itself a very vast step," says Karol K. "If it proves to be successful, we shall have gone far."

The reform, however, also works with "states of emergency" where the government may be forced to intervene quickly. And this in itself already constitutes a big pitfall, for Poland is now in an actual state of emergency "which in itself threatens the reform before its implementation."

That is also why the price, wage, fiscal, and investment policies of the reform project are closely connected with this political intervention (more on this in a subsequent article). The reform project, however, states the necessity of a legally very strict interpretation of exceptions to the demand that 'the sejm' have the decisive word in every economic issue.

However, even if one visualizes the actual transfer of the power to the 'sejm' this is only the first step. For in order for the 'sejm' to function, many reform politicians and reform economists, which also means the architects of the reform project, realize that the issue of the representation of the 'sejm' will have to become the next issue to be taken up. The existence of different social and political interests in the Polish society has been recognized openly, and, during the last many months they have come fully to the fore, but many committee members doubt that the multiple interests are represented in the body which will now be given its proper parliamentary power. The wording of this as well as many other of the burning questions reflects the feeling that one should not provoke the authorities more than is absolutely necessary. On this, Karol K says: "It is worth noting that old party veterans who have been through several unsuccessful reform rounds have been driving progressive forces within the committee."

Many Consequences

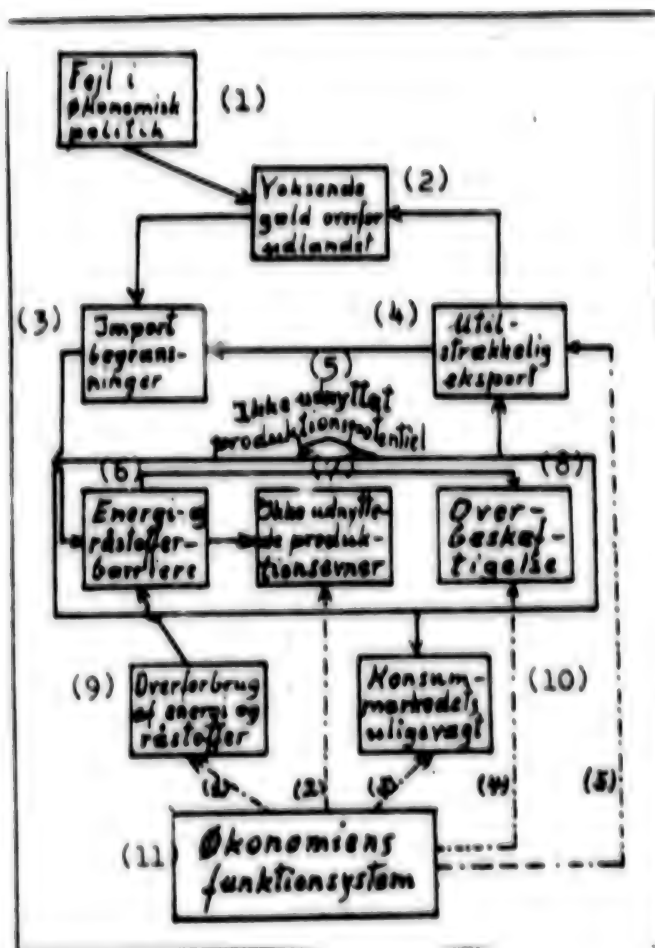
One of the observers of Solidarity in the committee, Waldemar Kuczynski, says it this way: "It is now the government which gives orders to the parliament. If we can reverse this, it will have many consequences."

"Of course, it does not help having fine banking systems unless the parliamentary power is an actual expression of the existing social conflicts and demands," says Karol K. To the question whether this means a multi-party system he says: "We already have got several parties. If, for example, the Farmers' Party actually safeguarded the interests of the farmers, we would then also in practice have the multi-party system. What is important now is that the process which has been started in the 'sejm' continue. All those who have had occasion to attend assemblies of the 'sejm' are surprised at the many things which actually happen. The government is being asked questions of a nature which previously was unheard-of because the members of the 'sejm' felt that it would be a political insult to ask blunt questions or to criticize the government. The reform project demands that the government bodies guarantee that this may continue and develop into the direct contribution on the part of the 'sejm' to broad acceptable goals for the future development. This process is to be made irreversible. There must be no doubt whatever that we will continue along this road. If doubts spread, an invaluable political capital will be lost."

Political Capital

The implementation of the reform project does not least concern the administration of 'the political capital', resulting from the social conflicts of the last few months. It is clear that many within the party and state apparatus will oppose the project. "The danger is, of course, also that many good intentions will be shipwrecked because the weariness spreads or because the struggle of everybody against everybody is given free rein," says Karol K. "There are already tendencies toward the latter thing. Retirement pensioners, for example, have slipped completely into the background because of the pressure for higher wages on the part of the strong groups."

Nor do the conflicts within Solidarity, the union federation, make it any easier. Waldemar Kuczynski, who is a valued adviser to Solidarity and, as stated previously in this article, is the observer of the union federation in the government committee, has pointed out that his positive attitude toward the reform project is a "personal expression of sympathy." Lech Walesa has promised that Solidarity will "take it as Poles." But neither he nor anybody else can, at the present time, say whether the union federation will be willing, for example, to accept a cut in real wages, "or whether they will accept the closing down of an unremunerative enterprise. The conflicts are big. Lately, many more potential outbreaks of strikes have probably been suppressed than those which we have hitherto seen staged," says Karol K. However, he gives expression to great optimism. Not least because several of the subcommittees which have been working under the government committee are continuing their work. This applies, for example, to the working group on 'business management and self-administration' which is headed by prominent reform professors who have previously seen developments undermine good intentions.



The above diagram, showing the maladjustments of the Polish economy, was prepared by a group of young economists, headed by Leszek Balcerowicz. It was taken from their book: "Development Alternatives. The Economic Reform. Its Main Lines and Ways of Implementation." (PTE Publishers, pp 78, 79). It is these maladjustments for the solution of which approximately 500 people from all sectors of the Polish society have now presented a joint economic reform project.

Key:

- | | |
|--------------------------------------|--|
| 1. Errors in economic policy | 7. Non-utilized productive capacity |
| 2. Growing foreign debt | 8. Overemployment |
| 3. Import restrictions | 9. Overconsumption of energy and raw materials |
| 4. Insufficient exports | 10. Disequilibrium of consumer market |
| 5. Non-utilized production potential | 11. Function of economy |
| 6. Energy and raw materials barrier | |

7262

CSO: 3106

ADVISABILITY OF MORATORIUM ON CREDIT PAYMENT DEBATED

Opposition to Moratorium

Warsaw ZYCIE WARSZAWY in Polish 1 Jan 81 pp I, II of Supplement

[Interview with Bohdan Kosinski, adviser to the minister of finance, by Andrzej Krajewski: "A Moratorium? That Is Not the Solution"]

[Text] Just as we heard a year ago that 1980 would be the roughest year for our economy, we are now hearing the same thing about 1981. The interest and credits payments due this year will reach the colossal sum of \$10 billion. We will have to designate all of our returns from exports to western countries to this end, and we will also have to negotiate financing credit as well. Likewise, all of our imports from these countries must be financed by new credit. Thus Poland's indebtedness grows, while supplies to the domestic market will be still more scarce than they have been till now. Will we be able to keep this up under our new social situation as of August 1980, with the enormous increase in prices? Doubting this, scholars and journalists propose a moratorium.

We ask Bohdan Kosinski, adviser to the minister of finance and a specialist in foreign exchange monetary policy, the following questions.

[Question] What would be the basis for such a financial operation?

[Answer] I do not agree with the view that allows for the moratorium. However, we can begin by defining it. A moratorium is the postponement of the payment date of credits which have been incurred. It may be the result of the unilateral decision of the debtor, or it may issue from an agreement between debtor and creditor (which does not change the essence of the matter, however). In each case it signifies the breaking of credit obligations incurred at an earlier time.

[Question] What are the consequences of this action?

[Answer] A moratorium, which marks the ultimate catastrophe, is attended by broad negative consequences, both for the debtor and for the creditor. If a creditor, for lack of a better solution, consents to a moratorium, he endeavors, as a rule, to ascertain all of the consequences of such a step for the many suppliers and banks in his country who will not be paid at the prescribed time. The deferment of payments may threaten the existence of many firms. In any event, it may cause them to sustain severe losses. Creditors may find it necessary to extend special

financial help to firms which have been affected by the consequences of a moratory agreement. All of this costs money, and unfortunately all of these costs must be borne by the debtor, who must absorb the increased interest charges on his debt until the debt is paid in full. Thus, a moratorium is not a gift, but an unusually bloody and costly operation.

[Question] Are these costs negotiated with the debtor?

[Answer] This is, of course, the result of negotiations at the time that the moratory agreement is concluded. The subject of the negotiations, however, may be the concrete amount of costs and the way that they were determined, rather than the question of whether this amount should be covered.

[Question] Which countries have decided upon a moratorium on their debts?

[Answer] Most recently Turkey, although it may be argued that every case is unique, or not to be duplicated. For this reason it is better to speak in a somewhat more general way of the problems which can occur in the event that the situation is allowed to come to this. Clear principles for the formulation of this type of evaluation exist, since moratory agreements are carefully analyzed. Thus, the whole body of worldwide practice up to the present time represents a fairly large accumulation of experiences.

And so, when a moratory agreement is concluded, when discussion is begun to this effect, or even when a country indicates that it is ready to begin such discussion, immediately there is a sudden limitation of the possibilities for acquiring further foreign credits. These are very serious consequences, since credits are closely linked with trade and payments turnover. Without them it is impossible to speak of the normal operation of such turnover. Temporarily credit is not granted to the insolvent and unreliable debtor. In this way, the good position of our Trade Bank on the international credits markets, the position of a solid partner worthy of trust, which was achieved as the result of decades of work, would be ruined in one stroke.

[Question] But would new credits be necessary in the event of a moratorium? After all, the suspension of payments would free up the enormous value of our exports and we would have much greater funds than we do now for import purposes. This would enable us to extricate ourselves rapidly from the crisis situation. Thus, at least during the moratorium, we would not need new credits.

[Answer] But we would need them, at least to cover the interest on our debts. Moreover, foreign credits, even short-term credits, are too closely connected with the normal operation of international trade exchange for us to conceive of dispensing with them. It would also be naive to assume that a moratorium would not affect our position as an exporter of goods and services, and that we would retain total freedom to develop exports and to utilize our export returns. There are serious apprehensions that a portion of our export earnings would be withheld to cover the claims of creditors. Moreover, this would create a threat to Polish assets abroad, to our accounts in foreign banks, to the funds used by Polish bank and trade outlets in other countries, to cargoes of goods destined for Poland and to outstanding charges for goods and services we have supplied, for completed construction

projects and the like. Creditors who would not be included in the moratory agreement or who felt that our debts to them were not met to their satisfaction would probably attempt to settle their claims in this way, by confiscating our assets.

[Question] Isn't this looking at the dark side of things? Have there been examples of such actions throughout the world?

[Answer] Of course. And these are well-known facts--they are classic examples. Naturally we can hope that what has happened with other countries does not happen to us. But can we allow this to be the basis of our payments policy?

There are other dangers as well. We must take into consideration the fact that creditors who conclude moratory agreements try to impose an economic program on the debtor. According to their line of thinking, such a program should lead to the revitalization of an ailing economy and should guarantee the earliest possible repayment of debts. Let us not delude ourselves--this would be a program of extreme frugality worked out according to the needs of creditors, not according to the needs and preferences of the Polish people. Meanwhile, there is no doubt that it is better to implement even the most stringent economic program that imposes even the stiffest requirements, because it is a plan established and adopted by us ourselves.

[Question] But it is difficult to resist reflecting that it is not our creditors' program but our own that has brought Poland to its current economic situation. What alternative do we have to a moratorium?

[Answer] The gradual, consistent return of what we have borrowed from other countries out of our export receipts and, temporarily, at the price of incurring new credits to this end while, at the same time, securing the normal operation and further development of the economy.

In the first place, it is essential to guarantee the dynamic development of exports, for which we have all the necessary conditions--a rich store of raw materials resources, an expanded production apparatus and a qualified work force.

At the same time, the measured growth of imports is indispensable to ensure that the national economy is supplied with the most essential goods. This increase should proceed at a rate considerably slower than the increase in export. The means serving the attainment of this goal should be a program of foreign exchange savings decisively introduced into all spheres of living, the gradual increase of self-sufficiency in the sphere of the production of agricultural-food articles and actions taken to reduce the import-intensiveness of industrial production.

For the next few years it will be necessary for us to use large amounts of foreign credits to this end.

[Question] Exactly how many years?

[Answer] That will depend on how quickly we return our economy to its normal state and how fast we are to achieve increased production.

At this time it is difficult to give a precise answer to this question. There is still no plan for the year 1981 and for the coming five-year plan period. Drafts

of plans are being prepared, however. They will be coordinated with the changing evaluations of industrial production output for the coming year and the closely connected turnovers of foreign trade.

The calculations which have been made allow us to determine that, depending on how our trade turnovers shape up, the period of a high need of foreign credits will be the next 3 to 4 year period. The greater our export, the more our export exceeds our import, the shorter this period will be.

[Question] Is there a high rate of interest on credits which we now have--up to 20 percent?

[Answer] The average rate of interest that we now pay on the foreign credits we have incurred is much, much lower. Despite this, however, due to the high level of our indebtedness, the combined interest rate on foreign credits is considerable. This is why it is essential for us to begin to clear ourselves gradually of debt as quickly as possible.

[Question] Then how long will our indebtedness continue to grow, and what amount will it reach?

[Answer] In all of the variants of the plan which we have seen up to the present time--even the most pessimistic ones--it is projected that the growth of our indebtedness in 1981 will be considerably less than in 1980. During the years 1982-1983 we should achieve the stabilization of the level of indebtedness. The process of clearing up our debts should begin in 1984. The maximum level of indebtedness will depend on the amount of annual increases resulting primarily from the relationship of export to import.

[Question] When will we be completely out of debt?

[Answer] This is not as vital. Completely dispensing with the use of foreign credits would be unnecessary and unreasonable. We should continue to buy and sell many goods in the future on credit. Moreover, in order to insure the development of exports, we, like other countries, will have to increase the amount of credits granted to foreign consignees. Nor should we abandon credit in imports; rather, we should maintain the amount of foreign credits used within the proper limits in order to avoid encumbering the balance of payments excessively with the costs of the service of foreign credits, i.e., with payments of credit installments and interest.

[Question] This borderline relationship amounts to approximately 25 percent, and if I am correct we exceeded it in 1976.

[Answer] At one time there was such a traditional view of this matter. Today the approach to this problem in worldwide practice is somewhat different--it is more flexible. What is given more consideration are the decisive factors with regard to whether the given level of encumbrance of the balance of payments with the costs of the service of foreign credits is admissible or excessive. In any event, it is certainly not a profitable situation when the payments of credits and interest exceed one-third of the export receipts to a significant degree. In my opinion, we will be able to think about guaranteeing the correct proportions of

the various situations of the payments balance not during the current five-year plan, but during the plan period to follow.

[Question] There are several weak points in the argument you have presented. First, are we in a position to acquire credits, even for the whole of our import for the coming year? Without them, or rather, without grain we cannot survive, nor will we have goods for export.

[Answer] Undoubtedly, the program of action outlined here is highly risky--just like every economic program which aims at overcoming difficulties. Each point of the program has the possibility of failure. Instead of achieving a considerable increase in exports, we can bring about a collapse of export production and deliveries designated for other countries. We can continue to demonstrate a lack of discipline and to exceed the prescribed import volume. Then we will most definitely lose the possibility of acquiring the necessary foreign credits. The program of action itself does not secure us automatically against the risk of failure.

[Question] If during talks with foreign banks we are convinced that we have reached the limits of trust, will the moratorium be our only way out?

[Answer] If we are brought to the point of catastrophe, then, of course, we will no longer be able to meet our obligations. All of the phenomena which normally accompany catastrophic situations will set in. However, this will be no way out for us. The world will charge us down to the last penny for all the costs of the financial difficulties this causes for other countries. We will also bear the costs incurred as a result of the setback to the further economic development of the country. The total costs will be enormous.

Comment by Moratorium Backer

Warsaw ZYCIE WARSZAWY in Polish 1 Jan 81 pp 1, 11 of Supplement

[Article by Stefan Bratkowski: "Mr Adviser, We Await the Alternatives"]

[Text] Yes, it is true, a moratorium is not a pleasant operation. But we cannot risk the life of our economy in order to gain a good opinion in the eyes of the Bank of Trade. This is not a way out either.

The information concerning the dangers connected with a moratorium, moreover, have been presented by the adviser in a biased way in this interview. A moratorium which would not include an agreed-upon adjustment of a given debt, a moratorium which would not settle the questions of security for our assets in foreign banks and export receipts currently outstanding would, in short, be a poorly negotiated moratorium executed by incompetents or people of ill will.

The adviser to the minister of finance should also present an alternative, in view of his opposition to the idea of attempting a moratorium. I take full responsibility in saying that an economy, even with the most fruitful reform of management, would be in a position to support the inflationary pressure of financing export production at a level of \$10 billion annually. Continued "large sums of foreign credits" would only mean the further increase of such pressure. If the adviser to the minister of finance does not understand what this leads to, then I really

do not know who should understand it. Next, how can trade be carried on, how can we sell, when the purchaser knows that the seller MUST SELL HIS GOODS at any price? This is something that any clerk can tell you about. Why, then, the talk about the "preferences of the creditor" in the event that a moratorium is called? We might have expected the adviser to the minister to propose negotiations with our creditors to achieve, for example, the amortization of a portion of our debts. It is an open secret that the producers of "Dziady" were ready to pay whatever was asked of them. The costs of certain contracts have considerably surpassed the amount that someone else on the world market would agree to pay. We have bought factories which were liquidated by the previous manufacturers and we paid to have them dismantled while the former owners ought to have paid for this. The famous studies for modernizing Tarpan at a cost of several tens of millions of dollars is another flower from this meadow, and we have such flowers in abundance. With our purchases we also saved declining firms, the condition of which had been described in detail by the world press. I believe that we should ask a group of respectable, competent experts to collate the amount due us with the real value of what we pay for. If someone was helping his own companies by extending credit to us for our purchases in these companies, let us permit ourselves to ask whether we have not already paid enough, or whether we must still pay more. This does not sound very nice on my part, but business is business. Let us lay our cards on the table. It is not only a question of our having taken immoderately, but also a question of their having given immoderately, since they would never have given so much money to a private firm so poorly managed. It was obvious to every expert that even the sum of \$5 billion in annual payments was excessive for such an economy as that of Poland. And certainly during the next several years... So what were they counting on?

I know that there are people of good will in the banking world who are ready to offer us continued favorable credits at low interest, under the condition of effective reform in management and the exchange of economic teams. But, my dear firm, such good will will not save our economy. The threshold of disorganization has been exceeded. Reform itself will solve nothing. Even if we export blood and tears our economy cannot reach the level of export in the range of \$10 billion annually. And it will not reach this level even in 5 years--and this is the opinion of those whose forecasts may generally be believed. It is simply technically impossible.

Peace and quiet in this corner of Europe is worth any amount of money. We all know this. But this money must be managed rationally. A moratorium will enable this. Continued indebtedness will not.

Of course I sympathize with the Bank of Trade. But I sympathize more with the Polish economy. And with us all.

After the time to protest was in 1975. And if, as in the old mountaineer anecdote, someone got home then, find us solutions now which are a "yes" answer. We have learned to say "no."

Excuse my impertinence. But I was at home then.

(Signed) Józef Brzozowski

P.S. The way in which the temporary measures for serving current trade operations are being managed under the moratorium--Mr. Adviser, how can you say such things?

45/4
28/11/2020

ELECTRIC POWER DEVELOPMENT PROBLEMS DESCRIBED

Warsaw GOSPODARKA PLANOWA in Polish No 11, Nov 80 pp 547-552

[Article by Marek Jaczewski: "Problems in Developing Poland's Electric Power Industry"]

[Text] A specific feature of Poland's electric power industry is the overwhelming preponderance of thermal electric power plants over hydroelectric power plants. This is the result of Poland's fuel resources and natural conditions that limit the construction of hydroelectric power plants.*

In the production of electric energy, hard coal constitutes the greatest percentage share.**

Up to the end of 1975 there were almost no problems in supplying electric energy in our country. The problems occurring since the beginning of 1976 are partially the result of investment delays, excessive energy intensiveness of some industrial subbranches and plants, and a certain disharmony in economic development related to the quite rapid initiation of many new industrial plants during the first half of the 1970s. These irregularities now are being consistently offset.

In forecasting electric energy demand, daily, weekly, monthly, annual and multi-year forecasts are taken into account. The forecasts are also used for the operational planning of repairs, as well as in preparing investment programs. Currently the forecasting error is about 2 percent.

Total electric energy production and peak-power output are shown in Figure 1,

The data for 1979 and preceding years represent electric power actually produced, but for the 1980-1985 period the data represent a forecast of power industry expansion as laid out by the Eighth PZPR Congress.

* In Switzerland, Sweden and Norway as well as in many non-European countries, including Canada, over one-half of the electric power is generated in hydroelectric power plants. In Spain, France and other countries, the share is over 20 percent.

** In Europe, the FRG, the GDR, the Netherlands and the UK have a similar electric energy production structure.

The expected growth in demand for electric energy means that the program for the far-reaching rationalization and improvement of the effectiveness of using energy must be realized. If it is not, plans in many areas of the national economy will not be completely realized. In industry it will be necessary to substitute other energy sources for electric energy, as well as to expand the use of electric energy in association with the ongoing mechanization and automation of work. It should be emphasized that some technological processes require the use of electric energy to achieve high-grade products. Because of the worldwide shortage of crude oil and gas, the further electrification of transportation, above all rail and urban transportation, is necessary.

In agriculture, as well as in the residential-municipal and services sectors, we must also expect a significant increase in demand for electric energy. The mechanization of animal breeding and processing work (preparing meals, supply water and irrigating crops) means not only a very rapid increase (up to 13 percent) in agricultural demand for electric energy, but also changes in qualitative requirements in this area. Many rural consumers are very susceptible to power supply interruptions (for example, poultry and cattle farms), and thus the degree of certainty of receiving energy for these activities must be high. Therefore, in case of a breakdown, diesel units are a necessity in these areas.

The extensive use of electric energy to heat residences and offices in the cities and rural areas must also be considered. This phenomenon is especially critical at the beginning and end of the heating season, at times when the temperature falls suddenly or when central heating systems fail. The demand on the electric power system increases by about 100 mw for each degree of decrease in the average air temperature in Poland. The stipulation of improved thermal insulation in buildings is very significant here.

The number of electric home appliances will also increase. Electric kitchens and water heaters are now displacing coal kitchens and stoves to heat water.

Current use of electric energy in Poland for residential-municipal purposes is relatively low: it is barely about 700 kwh per resident which places Poland among the lowest in Europe. Nonetheless, the demand for electric energy by this sector is significant and is increasing by about 8 percent annually. But we should expect that this situation will improve rapidly in view of the increased number of modern residences and the general rise in the living standard. This trend deserves our full support and, in conjunction with this, it is recommended that it be accompanied by the introduction in the market place of high efficiency electric appliances.

An evaluation of Poland's energy balance and fuel resources indicates that up to the year 2000 electric energy must be generated not only by power plants burning hard and brown coal, but also by nuclear power plants. Since it takes a long time to build a power plant--about 20 years--the plans for power plants up to the end of this century already have been prepared, even though construction has not started yet all of them.

Figure 1 shows the structure of electric power generation.

As can be seen, in the year 2000 about 25 percent of the total energy will be generated by nuclear power plants. At the same time, thermal-electric power plants burning hard coal as well as brown-coal-fueled power plants will be expanded to a great extent. The Belchatow basin is now in production; the development of the Legnica basin will follow in approximately 1990.

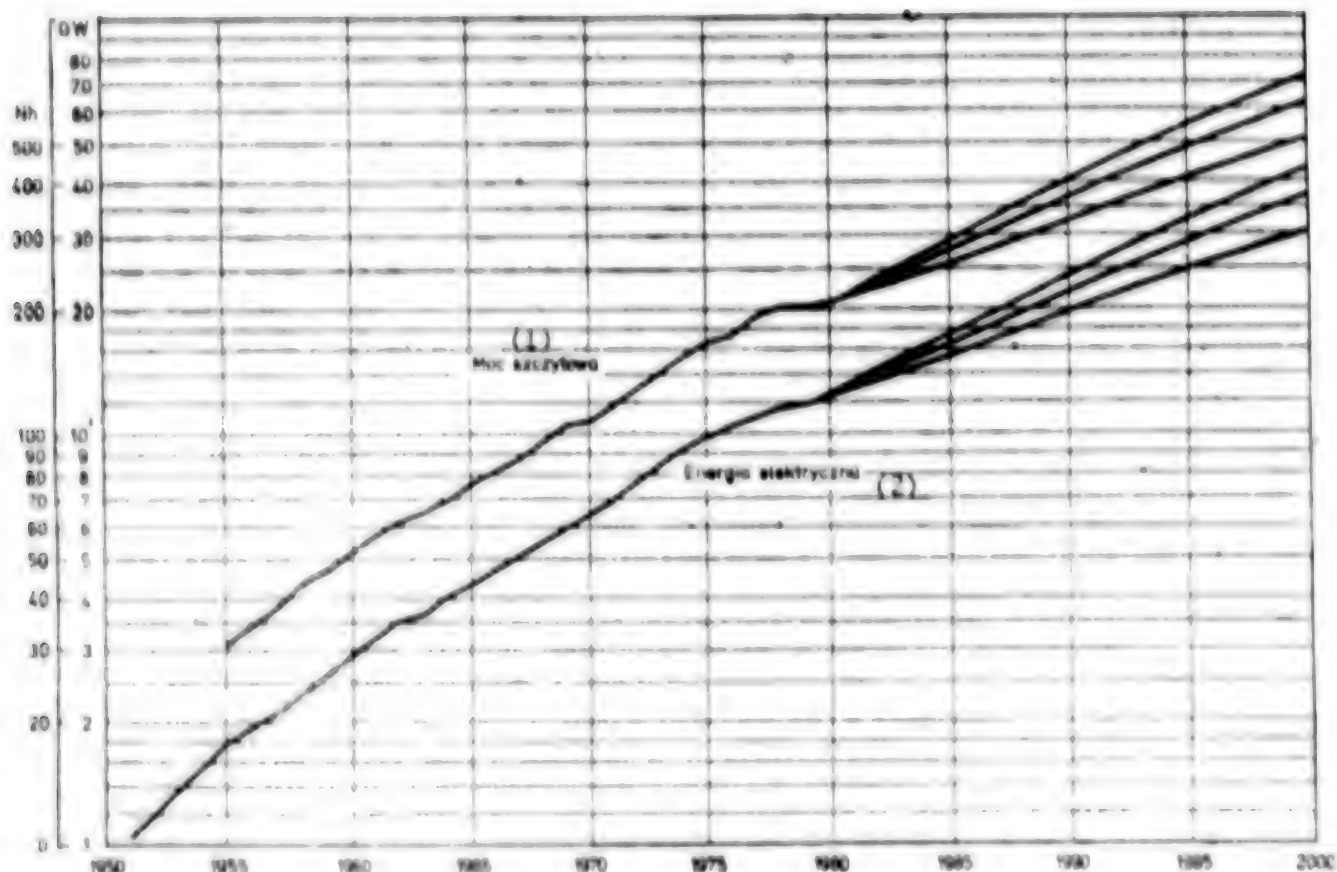


Figure 1. Total electric energy production and peak-power output for the 1950-2000 period.

Key: 1. peak power

2. Electric energy

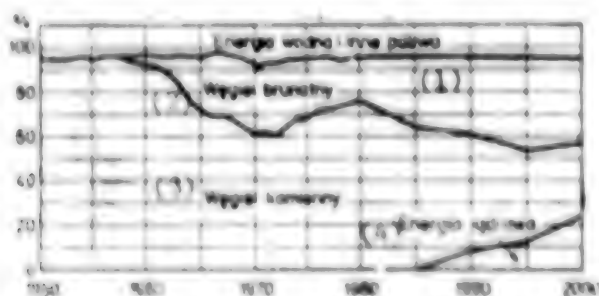


Figure 2. Structure of electric energy production

Key: 1. Hydroelectric and other fuels

3. Hard coal

2. Brown coal

4. Nuclear energy

Since the Opole and Płomień power plants, which produce electric energy from hard coal, are placed in operation, the Łazów electric power plant and a power plant to be located in the Lublin coal basin will be built.

The nuclear power plant construction program and the overall structure for the production of electric energy in Poland (17 percent of total electric energy in 1980 will be produced by thermal electric power plants) present difficult tasks in the area of power regulation. To this end the hydroelectric power plants stipulated

in the Wisla program will be used. In addition, pumped-storage power plants will be expanded rapidly. With the Porabka power plant (500 mw) finally placed in operation in 1980, the Zarnowiec pumped-storage power plant is being built very rapidly, and others are in preparation.

With the small flow capacities of Poland's hydroelectric power plants, it is estimated that adapting the production of electric energy to daily changes in the load curve requires that pumped-storage power stations generate about 7.5 percent of peak-power requirements, that is about 1,500 mw in 1980. Currently, as a result of investment delays, these power plants generate less than 5 percent, which aggravates the existing power shortage, especially during the winter peak-load periods.

Among the problems presented by electric energy production, protecting the natural environment is especially important. Selecting the location for a new power plant always begins with an analysis of requirements regarding air pollution and permissible heating of power plant cooling water. Thus construction of additional power plants is limited, and it would be advisable to reconstruct the oldest existing power plants. Before building the Belchatow power plant, controlling Lodz's air pollution was analyzed in detail.

The means now used to filter exhaust gases (electrofilters and very high smoke stacks) will no longer be adequate in the second half of the 1980s. However, the introduction of new methods requires studies because to date completely substantiated methods have not been developed in any country. Presently, it is estimated that using the wet method to desulfurize exhaust gases--the most efficient method known--increases electric energy production costs by at least 20 percent. These outlays are necessary for the community's health (food--the pollutants enter the soil). Greater effort should be exerted in the restoration of brown coal excavations and slag dumps, and in the utilization of ashes and waste materials.

It should be emphasized that a true resolution of the environmental protection and territorial development problems not only does not degrade the surrounding areas, but also can transform them into attractive recreational areas. For example, there is the Rezbork power plant. To cool the power plant a reservoir was created for the water flowing in the nearby river. Recreational facilities are now located there, and the heated water extends the swimming season. Similar projects were undertaken in the Pateau power plant region, and a center on the Vistula River near the Kozienice power plant is now under development.

Nuclear and heat generating plants will continue to produce a certain portion of the total electric energy in the future. The coproduction of electric energy and heat is now the most efficient method of using fuel and is very beneficial from the viewpoint of protecting the environment. In large electric and heat generating plants, about 97 percent of the dust is eliminated, and in the future sulfur will also be eliminated. This was not possible with small community heating plants. It is worthwhile to compare air cleanliness in Warsaw's Wola district before and after this area was included in a heating system. An extensive program to build electric and heat generating plants will gradually encompass all the bigger cities and industrial enterprises using heat for production purposes. The development of large heating systems will begin in Poland in the 1980s. Such a system now exists in Warsaw, Gliwice and the tri-city area. In all probability such a system, associated with nuclear power plants, will also arise in the Belchatow region and will eventually

include Lodz and other regions. At present the transmission of heat up to about 30 km is profitable. The distances between Belchatow and Lodz, and Zarnowiec and Gdynia are in this range.

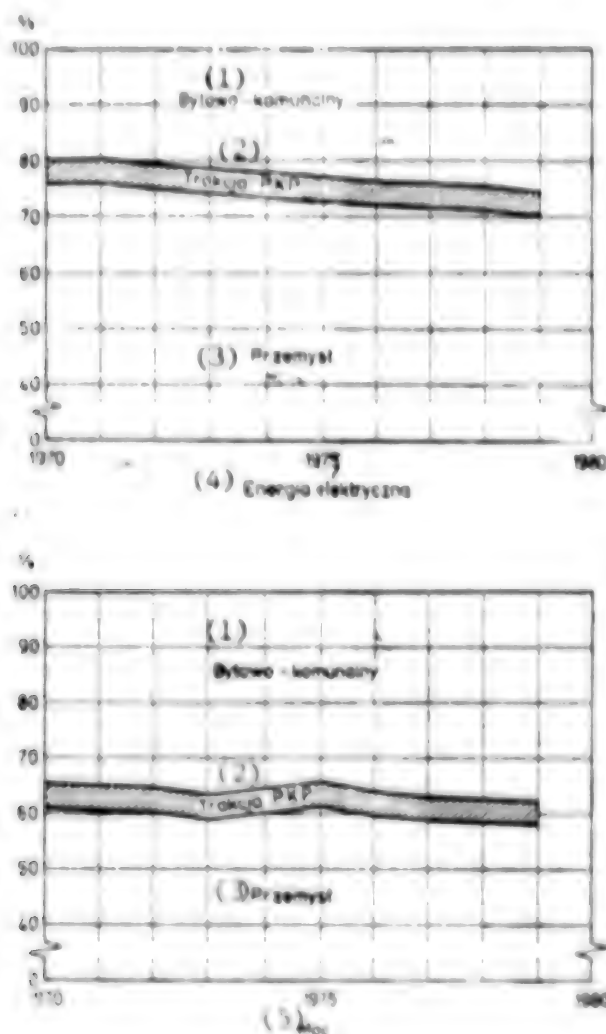


Figure 1. Energy use and power requirements by sectors of the economy

Key: 1. Residential-municipal 4. Electric energy
2. Locomotives 5. Power
3. Industry

In the area of techniques to generate heat and electric energy, industrial applications of burning coal on a fluidized bed and the first steam-gas systems based on coal gasification will be introduced in the 1980s. It is expected that very important qualitative changes will also occur in the area of conventional power. After the 200-mw and 500-mw power units, the 360-mw power units will be widely used, which not only will improve the efficiency of generating electric power, but will also reduce employment per megawatt of installed power and significantly reduce material use (10 to 30 percent). The construction of nuclear power plants will greatly improve conditions relative to protecting the environment, but it will require the use of very high quality materials and appropriate automation which will

stimulate development in many areas of industry and, undoubtedly, beneficially affect the level of technology in Poland.

Considering the power deficit occurring over the past years, a significant number of investment outlays are designated for the construction of power plants using the cheapest designs in their networks. In this case, the annual determination of outlays is especially disadvantageous. As a result of limited funding, the 200-kv network is being expanded of necessity. However, after several years this network has shown itself to be inadequate. Energy investments are capital intensive and are amortized over long periods, on the order of 20 years or longer. Less outlays are needed to build 220-kv lines rather than 400-kv lines, but within several years the increased losses incurred by operating 220-kv lines exceed the immediate investment savings. Currently power losses on Polish lines are high, about 10 percent. They result above all from the inadequate expansion of the 400-kv network and from the required uneconomical flow of energy under power deficit conditions, and periodic difficulties in the transportation of fuel, especially in winter. One of the basic tasks in Poland today is to expand the 400-kv network.

To reduce losses and improve the certainty of delivering energy to consumers, it is necessary to enlarge the medium-voltage and high-voltage networks. The extensive expansion of these lines must occur in the 1980s. It will include replacing wooden poles with concrete ones and punch-through insulators with punchless ones, increasing line conduit size as required to satisfy increasing loads, and, above all, replacing old distribution facilities with new facilities. A modern medium-voltage network can no longer be serviced by current methods since this requires too much time, large amounts of specialized equipment and extremely long repair times. The situation can be improved by the mass and consistent introduction of modern standardized equipment (so-called two-element distribution panels), prefabricated substations and the like. In case of an accident the emergency service crew replaces only the bad component. This should take no longer than 1/2 hour to 1 hour, excluding travel time, depending on the extent of the damage. At present it takes many hours to repair damaged equipment and frequently requires several trips by repair crews because of the great variety of equipment and the nonconformity of conventional standards designs which make quick repairs difficult to do.

Attention must also be paid to the more extensive use of cable networks, especially in the cities. The huge number of low-voltage and medium-voltage overhead lines that were erected during the period of Poland's rapid electrification in 1950s with the then existing technology must be modernized. We must change over to cable lines in the cities as much as possible because overhead lines hamper road transportation and limit land use. It should be emphasized here that the very low amount of land in cities make it formally impossible to economically justify the construction of cable lines. As a result, even in obvious cases we must seek various economic justifications, and final resolutions are at times quite difficult.

The thought of saving land occupied by power transmission lines, particularly of medium-voltage lines will be built in Poland in the 1980s. Because of the lack of land in Poland, the economic justification for these studies seems to be with difficulties, as well with formal difficulties. For example, land costs for a medium-voltage line amounts to 2 to 5 percent of line costs, but in the United States and the Soviet Union it is 10 to 15 percent. To run high-voltage overhead lines through a city as is done in Poland is undesirable in

these countries. Instead, for a long time cable lines up to 220-kv, and even at times 400-kv lines, have been the universal practice in the large cities.

In 1981 the first segment of the 750-kv line, to be built in the framework of developing the CEMA power system, will be placed in operation. This line, based on Polish technical designs, will not hinder the use of land under it. It is designed so that the electric field strength under the line will not exceed 10 kv/m under all, even extreme, atmospheric conditions, which is acknowledged worldwide as completely permissible. This electric field strength value will have no greater effect on the environment than that from a 400-kv line (Poland now has 1,000 km of 400-kv lines and they present no problem).

The extensive program to expand the electric power industry requires the production of suitable amounts of necessary equipment. To delineate the scale of the problem it is sufficient to add that the power of the facilities that will have to be installed in the 1981-1990 period is almost equal to the power of all facilities now in operation and which were installed over almost a 60-year period, especially during the last 35 years.

Linking power production with the industry producing the basic machines and power equipment and with the construction associations which will install them became an important prerequisite enabling this program to be realized. It will be necessary to greatly increase production of power equipment and the machinery industry by expanding existing enterprises and building new factories.

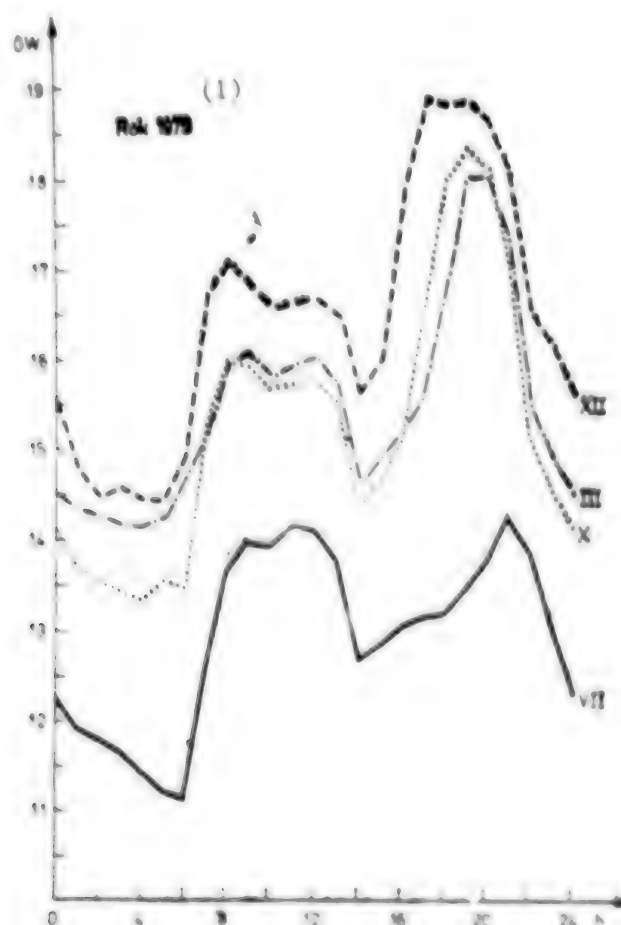


Figure 4. Typical curves of daily power demand during a work day for four different months of the year.

Ref:

1. 1979

In addition to equipment for conventional power plants, it is expected that the production of equipment for nuclear power plants will be expanded greatly in accordance with the socialist division of labor within the CEMA framework. The production of modern network equipment, specialized automation equipment and necessary specialized operating equipment will be gradually mastered.

Without going into the details of their calculations, we should add that based on experiences of previous years this equipment value represents about one-half of the power industry's outlays.

Increasing the output of brown coal, which in the 1980s will be the next most basic fuel after hard coal, will also be a big job. The output of brown coal during the 1981-1985 period is supposed to increase 100 percent, from about 40 million tons in 1980 to 80 million tons in 1985. The amount of soil which will have to be excavated from the brown coal mines in 1990 will exceed the amount of soil presently excavated from all the mines in Poland during a 1 year period.

It is expected that the production of the entire complex of machines and equipment necessary to mine brown coal will be initiated in Poland. Our positive experiences to date in producing components for such equipment and their assembly and improvement lead us to believe that in a short time KTZ [excavator-conveyor-dumping conveyor] units to mine brown coal will be completely produced in Poland. It is also expected that there will be extensive collaboration with other countries in this area.

Poland's tight fuel balance has created an indispensable need for frugal management of energy sources, especially upgraded sources, which includes electric energy. The tight balance of payments, investments and raw materials make the rational management of power a necessity. The share of energy and power output used by various sectors of the economy is shown in Figure 3.

It is especially worthwhile to turn our attention to the residential-municipal sector, whose share of domestic power consumption is significantly greater than its share of domestic energy input. To a greater extent this sector's peak power consumption is for lighting, mainly during the evening peak hours, and for various home appliances which people operate after coming home from work. It is very important here to popularize the idea that using appliances during peak hours, especially heating appliances, should be done judiciously, and that these appliances should be operated to the greatest extent possible during nonpeak hours, for example, during the 11:30-13:00 lunch break and after peak hours, that is after 21:00, and for housework, such as washing and ironing, on Saturdays and Sundays. Frugal energy management based on switching off nonessential appliances is also necessary.

The typical daily-power-use curve for Poland during a work day during four parts of 1971 is shown in Figure 4.

It clearly shows that reducing peak power for about 4 hours a day in winter could save about 2,000 MW, that is approximately the power given up for exploitation during the 1970-1971.

In addition to these types of organizational changes, new technical designs will also be significant. Further progress in reducing electric power consumed by appliances is necessary. To illustrate existing possibilities here, it is worthwhile

to add that a vacuum-tube-type black-white television receiver consumes about 150 watts, but a modern television receiver using integrated circuits consumes only 40 to 70 watts. Similarly, old fashion absorption-type refrigerators consume about 150 watts, but modern compressor types consume less than 100 watts. Lighting during the peak evening hours is the most drastic area. To illustrate the problem, lighting efficiencies for various lamps are shown in Table 1.

Table 1. List of some light sources produced in Poland

Light source	Range of power in W	Light bulb efficiency in lm/W
Incandescent light bulbs		
—Linear	15-1000	7.3-19.5
Fluorescent light bulbs		
—Linear	20, 25, 40	42.5-66.3
—Circular	20, 40	45.0-55.0
Mercury discharge lamps	80-2000	35.6-60.7
Halogen-vapor lamps		
—Linear	1000, 2000	22.0
Halogen lamps	400, 700, 1000, 2000	75.9-90.0
High-pressure sodium-vapor lamps	400	90.0

Source: "Technical Register for 80 Products," Ministry of Machine Building—Lighting and Electric Installation Association POLAM, WPM, WEMA, Warsaw, 1979.

Introducing and marketing modern energy-efficient electric appliances is a tremendous task for the electrical engineering industry. The sooner and more thoroughly this task is realized, the faster conditions will be created for the rational use of electric energy for peoples' needs. This is a prime social and economic priority.

In industry the rational use of energy is linked mainly with organizational and technological changes, for example, doing some changeovers and maintenance work during the second work shift, turning off some auxiliary machines during peak-power periods, and creating certain reserves of semifinished products during nonpeak hours to reduce power consumption during these hours.

In addition to organizational advancements, technological changes in the production process are extremely important. Among the conventional possibilities are using waste heat, avoiding the need to reheat components, reducing operating times and times between operations, and so forth. Comparing energy consumption indexes for the same products leads one to conclude that possibilities for rationalization are extensive.

As was the case for the residential-municipal sector, the introduction of energy efficient equipment in industry (for example, motors and thyristor-type drives) and modern lighting is essential. In a planned economy these tasks can and should be easier to realize and to accomplish more quickly than modernizing consumer appliances where devotion to tradition and likes and dislikes often are very strong.

It should be remembered that not all workers are frugal in the use of energy at their workplaces. This is so because electric energy at the workplace is paid for by the enterprise and not the worker. One of the daily tasks of social organizations and enterprise administrators should be to emphasize the economic use of electric energy in the workplace and to apply certain social pressures in this area.

The rational use of electric energy is a natural consequence of economic development in a modern country. It should become a daily practice for each citizen, just as compliance with rules of the road or knowing how to make use of the various technical discoveries of the 20th century.

Better utilization of electric energy use can produce extensive results. Extensive modernization of common electric appliances and of technology for industrial production to reduce their energy consumption is also necessary. The increased need for electric energy is a long-term and positive phenomenon since it signifies modernizing of life, improving the quality of production and raising the nation's standard of living. This use of energy, however, must be as efficient as possible, free of waste and extravagance.

The long-term program for expanding the electric power industry is one of the basic tasks of economic development. It is an example of a peaceful program for the development of the country and advantageous collaboration of the socialist countries.

11877

CSU: J680

LONG-TERM, COMPLEX MEASURES REQUIRED TO IMPROVE MEAT SUPPLY

Warsaw GOSPODARKA MIESNA in Polish No 11, Nov 80 pp 2, 3, 4, 28

[Editorial: "Concerning an Improved Meat Economy"]

[Text] The voices of the readers of our publication, which are the voices of workers at all levels of the meat economy, should be heard in the nationwide discussion on correcting the ills of our republic. In fact, given the particular role that meat products play in supplying the population and serving our export needs, the necessity for such a discussion and the absolute importance of considering further actions in the meat industry are obvious. This is all the more so, since this discussion has already been set in motion by the cadres of our enterprises and plants who, in their demands, have envisioned the necessity of improving the organization of work, of simplifying the systems of accounting and record-keeping, and of changing several obsolete regulations and the like, in addition to their other proposals concerning wage and pension increases, lowering the retirement age, and the introduction of a "meat industry worker's card" patterned after the "miner's card."

Nor do the workers approve of the diminished social status of their trade. One of the demands announced at the Elblag Meat Plant was the following: "The official position toward the meat industry as a subject of embarrassment, for certain socioeconomic reasons, is unfair to workers. Its place in the shadow of other industries, which reflects unfavorably on us, is also damaging. The lack of recognition for our industry kills our incentive."

We strongly encourage the readers of GOSPODARKA MIESNA to comment on the subjects treated in the following editorial article. The columns of our publication are open to all those who have the desire to see a constant improvement in the operation of the meat industry subbranch.

•

In order to extricate ourselves from the very difficult current economic situation, we must undertake both immediate multidirectional tasks and long-term measures. Due to the scope and dimensions of the crisis, all economic organizational units must be included in these steps, and virtually all problems dealing directly or indirectly with management efficiency, broadly conceived, must be tackled.

There is no need to prove that the meat industry must be involved in these tasks, since the effectiveness of the tasks it undertakes will be contingent upon how well they are targeted at solving, above all, the problems which can and should be resolved by the industry itself, producing measurable economic and social results. In this way the industry will make a welcome contribution to the economic renewal of the nation. Consequently, the specification of the directions of activity, especially calculated to produce the earliest possible results should be the point of departure.

Why do we emphasize the earliest possible results?

We do this above all because a broad range of effective short-term actions, which in sum could generate an impulse for our emergence from the crisis situation, is of the greatest value at present. Long-term measures in the meat industry, on the other hand, will be reasonable and of significance when it becomes possible to determine the developmental perspectives of cattle-raising for the next 10-year period more accurately, and when the whole complex of investments problems becomes clear in this regard. Of course, this does not exclude our carrying out the normal programs for developing the subbranch, for its organizational-technical reconstruction and the like.

Here we should explain at the outset that actions enabling the rapid improvement of the meat balance, including a marked improvement in the quantitative supply of the market with market and meat products, are not considered among the tasks producing speedy results. This is because a necessary condition for a significant quantitative improvement on the meat market is the substantial growth of cattle-raising, which is by nature a long-term problem and is the only way to affect the meat industry directly. Thus, the tasks of our industry should relate, above all, to the most efficient management of raw materials possible. While this will not guarantee an increase in bulk sufficient to be felt by society, it can bring about progress in management efficiency.

Thus, as we formulate the general course of action to be taken by the meat industry, we may say that the directions to be taken should be based primarily on the implementation of the principle known in economic theory as the maximization of the effect (i.e., production) using the given production resources. It is not a question, then, of an increase in production, an assumption which is simply not feasible over the short-term. On the other hand, it must be determined whether it is possible to maximize our market production using current production resources, and just what the potential is. The principle of minimizing processing costs must also be observed, of course. Processing costs also conceal reserves which are disregarded or little regarded due to the primary interest in the objectively dominant share of materials costs (over 80 percent).

In passing from general assumptions to concrete proposals, we must caution that we do not consider ourselves competent enough to offer solutions to several problems, the resolution of which is viewed in various ways. However, we would like to formulate some sort of list of those problems which we consider to be the most important, and which may be solved in an unequivocal manner in order to bring about an improvement in management efficiency.

In our opinion, we must turn our attention first of all to the necessity to observe a certain principle of a methodological nature which is a necessary condition for the effectiveness of the actions which are taken. This is the principle of the use of a comprehensive approach to solve particular problems, and not the autonomous treatment of various fragments of a given problem, as is often the case. For example, if we plan to look for a way to increase the quantity of bulk goods via an improvement in the make-up of the assortment structure, this problem must be linked with the balance of the various storehouses of raw materials (e.g., the grade of meat) and of direct materials (e.g., packaging), with the balance of labor intensiveness and production capacity, among other things, an objective conditions requiring possible changes in the assortment. We must also keep in mind certain market limitations and consumer preferences, but above all we must do something which is not always done—we must make the necessary accounting. This will show us that a new assortment structure enables us not only to increase the quantity of the finished product per unit of raw materials, but that product value is also increased.

Similarly, actions aimed at reducing processing costs and the various kinds of losses which lessen management efficiency (e.g. extraordinary losses) will be effective only insofar as they abide by the principle of comprehensiveness. For example, contractual penalties imposed for inferior quality may be reduced under the condition that we determine the source at which the penalties were imposed, which is sometimes quite a distance from the location at which the defect became evident (e.g. the defective operation of refrigeration equipment, and this is not only a defective technological process).

A particular requirement of an organizational nature is also linked to the comprehensive approach to the disclosure and use of reserves; namely, the requirement for the institutional guarantee of the operation of the principle of a comprehensive approach to tasks which are implemented. Someone must simply act to coordinate, and even inspire these undertakings. This individual should also guarantee that tasks will be approached systematically and not lethargically with an occasional crackdown, as is often the case. We are of the opinion that, given the diversity of the problems of the meat industry, problems which should be the subject of the tasks discussed here, the director of the economic element in a plant could act as coordinator, and a workers' team composed of specialists from the various organizational elements should handle work in conjunction with the disclosure of reserves and the development of plans for using them. The view that these plans should be worked out in consultation with the representative officials of the workers' collective of the given unit needs no justification.

The following, in our opinion, are some of the many matters which must be considered or viewed from a new perspective.

In the area of the rational utilization of raw materials, the course of action has been known for years. It relates to the supervision of the proper conditions for the purchase and transport of cattle for slaughter, to turning attention not only to the proper dressing and refrigeration of slaughter meat, but also the full and optimal management of all slaughter meat byproducts. Collection of the blood

and plasma extraction are worthy of particular attention here. It is not only the collection of the blood that is important, but also the assurance of the proper quality by means of the proper centrifuging, maintaining the proper bacteriological state and quick transfer for production.

The use of technologies which reduce losses and increase profits and work productivity, with their full effect felt under the condition of their proper application, guarantees the maximum usage of raw materials.

Assortment limitation in production is not a new problem. It has been broached more than once, but it is a moot point, since it is difficult to speak here of a rich assortment given the state of our meat markets. Without investigating the circumstances which, in currently time, led to undertaking the problem of assortment limitations, we are of the opinion that at present the goal of tasks in this direction should be primarily to aim to set in order the assortment structure of sausage from the viewpoint of the maximization of the increase of bulk goods together with an increase in the growth of value obtained per unit of consumed raw materials, while at the same time raising the quality level (which is no less important).

In the "first approach" to this problem, it would be possible, for example, to adopt the assumption of retaining only assortments of sausage with a productivity of over 100 percent, as well as retaining 10 to 15 assortments of the highest productivity. Such a mechanical approach will certainly be questioned as one which does not take into consideration the taste of consumers and particularly regional preferences, the rational utilization of raw materials and the like. Therefore we have defined the "first approach" as the one which has the advantage that it will not be liable to suffer from various subjective viewpoints and will be subordinated only to the primary goal--the maximization of quantity.

The variant resulting from the above should then be balanced with regard to its raw materials potential (according to the grades of processed meat), and then it should be checked for a growth in value compared to the average value attained up to that time. If this last check shows positive results, only then should the assortment variant which has been established mechanically be subject to certain eventual improvements based on the remaining criteria. Let us remember, however, that in our economic situation, which is presently characterized by a plan for meat rationing, the dominant problem must, of necessity, be to meet quantitative needs. This seriously limits the possibilities of serving individual tastes. Of course, such limitation does not exempt us from maintaining the proper quality of products and it does not limit the possibility of varying the seasonings according to regional tastes and the like.

The quality of meat products does not enjoy the best reputation among consumers. Without a doubt, this quality worsens on the way from the meat plant to the consumer, apart from the quality attained during the course of production. But it is no secret that the addition of substitute meat products does not improve quality. In fact, when these substitutes are used improperly during the production process, quality is impaired. At the same time, the risk of a reduction in quality increases in proportion to an increase in the amount of substitute additives.

Consequently, it appears that it would be desirable to consider the possibilities of decreasing such additives in assortments which now contain the highest percentage of them, or as an alternative, to consider averaging the percentage of additives to all assortments. The calculations in conjunction with this should be made on the basis of the already modified assortment structure of sausage mentioned above.

Unlike the raw materials situation, which has not always been as deplorable as it is at present, the problem of a permanent lack of auxiliary production materials in one with which the meat industry has been grappling for years. There is, above all, an insufficient amount of all kinds of direct packaging (casings, cans, aluminum foil, disposable packaging trays and the like) and indirect packaging (wrapping paper and packing boxes). Without questioning the expediency of introducing so-called high-quality production for the pre-packaging of meats and processed meats, we are of the opinion that this problem should be reconsidered at this time. We think that this matter should be viewed with the realities of the moment in mind. The fact that packaging materials which are in short supply are used in this type of production, as well as the fact that the quantitative losses during pre-packaging in the form of various types of waste occurring during slicing are quite considerable, should also be kept in mind.

Who knows whether an objective analysis of the profits and losses in this field would not lead to the conclusion that such production should temporarily be halted? This would also free up some human resources, who could then be used in other sectors of production (e.g., meat cutting).

The very meager assortment of culinary elements leads us to consider whether we should not increase supplies of variety meats for retail stores at the expense of limiting production which consumes the raw materials of variety cured meats. This problem should be reconsidered and it should be determined whether the circumstances which, in their own time, led to a forced increase in the production of variety cured meats at any price, continue to exist. At any rate, the growing abundance of varied meats, that was the case during the first half of the 1970's, is unfortunately no longer a factor justifying forced production in this unprofitable area. We believe that in the current situation we should adopt the principle that all variety meats which could be put to culinary use in their unprocessed form should be marketed in retail stores in this form. Only those variety meats should be processed which cannot be put to use in this way, as well as a portion of those meats, of which the processing is unprofitable. The indirect, but not insignificant result of limiting the production of variety cured meats would be the freeing up of certain human resources, since such production is extremely labor-intensive.

The problem of improving quality should regain its position on the first plane of tasks undertaken by the meat industry. Radical changes must be made in the system of evaluating the operation of plants and their divisions. Quality checks, properly understood, must be restored and quality control must be introduced. There must be extensive discussion of problems connected with the standardization of quality and with legal guarantees for protecting consumer interests in the area of providing obligatory information concerning products and product advertising. The expanded system of inspection institutions which has dispersed

authority and created a lack of accountability for the consequences of decision-making must undergo critical evaluation. This should lead to an unequivocal set-up for the sharing of responsibility for the quality of market products by the manufacturer and domestic trade, as well as to the granting of the proper role to qualitative controls.

In the face of a decrease in investment funds for new construction, activity in this field should be directed toward modernization. Halting or delaying the construction of the few building projects undertaken for the meat industry does not appear to be justified. In any event, the limitation of foreign exchange funds for the purchase of replacements parts spurs a reduction in the technical level and efficiency of plants and production lines installed within our industry. A shift of approach should be made in this matter.

The difficult working conditions in the meat industry and the relatively low wages cause a permanent shortage of employees. These questions are posed clearly in demands voiced by the cadres of meat plants. A radical change here is essential. Problems of work organization and management efficiency, as well as changes in production engineering and techniques which would lead to reduced labor-intensiveness and would facilitate work, are a separate category in the planned development of the industry to be given greater consideration than was formerly the case. A welcome field for activity is that of simplifying production engineering and making techniques more efficient in the area of jointing and carving in conjunction with processing technology.

Finally, the role of scientific-technical facilities for the development and operation of the meat industry merits our attention. We are speaking here of the contribution of the Institute of the Meat and Meat Fat Industry, the Office of Meat Industry Planning, the MEATALOWIEC Repair and Assembly Plants (ZRM) and industrial laboratories in the implementation of the tasks of the industry. The scientific and research potential of the institute is considerable; on the other hand, the number of projects put into practice is unsatisfactory. It is our opinion that at a present stage it once again becomes urgent to consider designating one plant as experimental, to work together with the institute on a continuing basis. Conditions to facilitate putting theory into practice would be created in this plant. The creation of a material base for the activities of the Industrial Equipment Plant of this institute in the form of a prototypical set-up seems to be indispensable. It should be considered whether the closer cooperation of this plant with the SPOMASZ Research and Development Center (OBR) in Wrocław, which specializes in the planning of machinery and equipment for the meat industry, including its organizational linkage, would not be the speediest and most rational way to solve the problem.

In the current discussion of the shortage of meat and meat products in market supply, calling a halt to the export of these products is often suggested. It is our observation that such a decision would hurt the national economy and, thereby, society. Consequently, we must maintain export production of traditional assortments, which enjoy a worldwide reputation and bring high prices if for no other reason than to purchase fodder, culinary meats or processed meats with the foreign exchange monies brought in.

In calling for management efficiency and encouraging discussion of the methods of fulfilling the social tasks of the meat industry, we must begin by dealing with the forces at work in the current situation. The phenomena which must be taken into account, and which will limit the possibility of taking measures in this field are above all:

- the decreasing amount of raw materials resources,
- the worsening quality of slaughter animals,
- the technological and organizational complications linked to the announced rationing of meat,
- the lack of replacement parts for machinery and equipment, as well as for vehicles and the like, and the lack of real prospects for finding funds for import purchases, and the meager opportunities for increasing domestic production; this also refers to the exchange of used equipment,
- the uncertain prognosis with regard to meeting energy needs in full, particularly during the winter,
- problems with shortages in work crews and problems connected with the possible oversupply of crews in the event of a temporary decrease in production,
- with the introduction of meat rationing, the much more aggressive attitude of consumers and trade which is anticipated when they receive products of inferior quality; the reaction of the consumer to the poor quality of goods sold them is a phenomenon which operates constructively upon the work of the manufacturer, nonetheless during a transitional period it can cause much difficulty, particularly in those cases in which the quality of products is linked to the quality of the available raw materials,
- the lack of prospects for the rapid introduction of normal raw materials-to-product and product-to-product price ratios.

The phenomena allowing for optimism in the establishment of a strategy of operation are:

- the prospects for the motivational regeneration of the social climate, including the production climate,
- the granting of priority to the food economy, as declared by the highest state authorities.

The analyses of conditions and proposals for the establishment of rational methods of operation show that the following are needed:

- a system of market supply under conditions of meat rationing. This will necessitate the establishment of principles for balancing export production and production for the domestic market, assortment changes and radical changes in the system of turnover in domestic production. It is important that, apart from the rapid and worthy performance of the tasks of domestic market supply under our current conditions, we not allow ourselves to slump into habits of improvisation in processing and distribution or to reject modern technology,
- finding ways to stop the catastrophic worsening of quality of slaughter raw materials (meat deterioration, damage in transit, insufficient fleshing and the like),

--the establishment of a long-range plan for protecting the means of production, primarily on the basis of our own industry, as well as in partnership with other countries with the CEMA framework.

--the reduction of energy-intensiveness of production,

--an increase in the use of all kinds of byproducts for fodder and technical purposes, keeping in mind the very important questions of environmental protection and reduced water consumption,

--a reduction in bureaucracy in the administrative apparatus of the industry, the streamlining and improvement of efficiency in quantitative inspections of production indexes,

--the establishment of principles of assortment reconstruction in processing in the direction of increasing the sale of highly processed culinary meats and reducing the sale of variety cured meats. These principles should be established with the opening of cooperative and local processing kept in mind. The distribution of production tasks among partners and the establishment of rules for the distribution of raw materials should be expected from the beginning.

*

The above-noted phenomena specifying the operational conditions of the meat industry and the several examples discussed in greater detail certainly do not exhaust all the issues worthy of consideration and discussion; they merely point out a method of approach, given the new circumstances in which our economy, including the meat economy, finds itself. We believe that, according to this method, we should adopt the approach that all problems which conceal even slight possibilities for improving the situation should be thoroughly analyzed, that nothing has been permanently decided, that we must be flexible, and that in the meat industry, as well as in others, brainstorming may prove a very good method for raising the level of management efficiency.

8536

CSO: 2600

ROMANIA

SUCCESSSES, PROSPECTS IN INDUSTRIAL CONSTRUCTION SECTOR

Bucharest ROMANIA LIBERA in Romanian 27, 29 Dec 80

[Interview with Dumitru Popa, minister of industrial construction, by M. Radian, place and date unknown: "Advanced Technologies, High Efficiency in Construction"]

[27 Dec 80, pp 1, 5]

[Text] [Question] The entire country is a work site. Not long ago this was merely a saying, but the ministry you head, esteemed comrade minister, is the "number one" builder in the country. There are especially well known projects. For that reason, I would suggest a more profound look into this field, now, at the end on the five year plan and the beginning of the new five year plan. What could you tell our readers, for example, regarding the 3 year review of this branch?

[Answer] First of all, I must point out that for the workers in construction-assembly the years of the five year plan were years of work filled with sacrifice and devotion to completing the Party Program, the decisions of the National Conference and the previous guidelines and directives issued by comrade Nicolae Ceausescu in the field of investments. It was a five year plan that marked the most spectacular advances in the economic development of the country, when the largest volume of investments was achieved and which equalled nearly 80 percent of the total amount of investments made during the previous five five year plans.

In holding an important place within the branches involved in construction and as the principal builder of industrial projects, the Ministry of Industrial Construction was strongly implicated in achieving an immense volume of investments and construction. Thus, the construction-assembly realized during the current five year plan is recording an increase of 30 percent over the previous five year plan.

[Question] Certainly, such an increase has required special measures.

[Answer] Naturally. In order to meet these increased tasks a series of measures were taken, first of all, to appropriately increase the production capacity of the ministry's units. Thus, new construction-assembly trusts were established to better cover those areas where, during this five year plan, there was a noticeable increase in the amount of investments and construction. At the same

time, there was an increase in the supply of equipment, mechanized machinery, tools and devices to construction-assembly units. Thus, the equipment indices, expressed in fixed assets per volume of construction-assembly, reached nearly 600 lei per 1,000 lei of construction-assembly in 1980, up from 486 lei per 1,000 lei in 1975. Finally, but not in last place, I would also mention the fact that, along with the increase in production capacity which permitted the achievement of this increase in construction-assembly, there also was a substantial improvement in the quality of construction activities at the work sites, reflected primarily in the 57 percent increase in labor productivity in 1980, compared to 1975.

[Question] Since the growth itself in the volume of construction-assembly constitutes a point of appreciation more in the realm of the specialists, I would ask, comrade minister, that you point out how this increase in production was expressed.

[Answer] Along this line, I would mention that the main theme of the Party's Program in the field of investments during the current five year plan was not only the large volume of investments, but also the policy of distributing these investments throughout the country, pursuing, as you know, their distribution so as to ensure the harmonious development of all the counties in the country. As a result, during this five year plan the Ministry of Industrial Construction was present at the vast majority of industrial complexes: Zalau, Bistrita, Sfintu Gheorghe, Miercurea-Ciuc, Odorhei, Botosani, Vaslui, Pocsani, Adjud, Tulcea and so forth. These projects are on the way to transform the poorly developed counties into important industrial centers whose industrial production will exceed 10 billion lei.

[Question] How many new facilities were put into operation and which ones are more notable?

[Answer] During the course of this five year plan, up to the end of October, over 2,800 industrial and agrozootechnical facilities were put into operation, of which 1,667 facilities belong to the more important category, those followed at the central level. With regards to the most important projects put into operation, I would mention the new facilities at the Tirgoviste Special Steels Combine, the expansion of the alumina plant and the Ferro-alloy Enterprise at Tulcea, the Electric Steel Works and the rolling mill at the Cimpia Turzii Combine, the Zimnicea Pipe Enterprise and the additional facilities at the Roman Metallurgical Enterprise and "Republica" Plant in Bucharest, the heavy equipment combines in Craiova, Cluj and Iasi, the Giurgiu Machine Building and Heavy Equipment Enterprise, the Bacau Chemical Fertilizer Combine and the new facilities at the combines in Turnu-Magurele, Tirgu Mures and Craiova, the Midia Refinery and the expansion of the refineries at Teleajen, Borzesti and Pitesti, the cement factories at Hoghiz, Mintia and Tanca, and the sugar factories at Urziceni, Tandarei and Pascani.

To these can be added the numerous projects in light industry, spinning mills, textile mills, knit wear factories, clothing factories, as well as an important number of agrozootechnical projects for raising fowl and pigs, facilities for storing grain, vegetables and fruits, factories for producing combined fodder and so forth.

[Question] You mentioned an impressive figure for growth in labor productivity, an increase of 57 percent, something that will please our readers. What could you say in connection with the means of obtaining this increase?

[Answer] In the five year plan that is ending, technical progress in construction, and I am thinking of the industrial construction that we are involved in, had a continually upward evolution, with this constituting our principal instrument in achieving the increase recorded in the growth of labor productivity and the amount of construction-assembly which I spoke of earlier. I would like to point out that in achieving this industrial construction the building technologies are at the level of those used in the developed countries, adapted, naturally and certainly, to the specific conditions in our country. Moreover, the construction activity carried out during this five year plan, be it in developed countries or in third markets, clearly showed the high technical-technological level of Romanian builders.

[Question] What are some of the new high technologies used?

[Answer] The difficulty here is merely in selecting them. I would note, for example, creating the earthworks for building the great industrial complexes along the Danube: at Calafat, Turnu Magurele, Zimnicea, Giurgiu and Tulcea, as well as at the Navodari complex which, I would emphasize, were built with local materials using hydromechanics. This allowed us to considerably reduce the consumption of fuels and energy in general. Similarly, in building foundations we eliminated the use of pilings made of preformed reinforced concrete, as well as reinforced concrete foundation plates, by using other means to consolidate the ground, especially columns of dirt, sand, ballast or concrete mixed with ashes from thermal power stations, instead of those made of cement. All this was done using modern Romanian technologies such as vibro-floatation, vibro-pressure and others. Likewise, in the building of reservoirs, holding ponds and, in general, storage areas, we introduced prefabricated elements, sealed preformed elements, and walls made from prefabricated elements assembled in foundations using a cement gel (to eliminate water seepage in areas where there is a high level of ground water).

With regards to activities in the area of assembling equipment and technological installations, I can mention the extension of automatic and semi-automatic welding, as well as the development of prefabricating technological installations, with special stress on increasing the quality of the work.

Finally, it is worth remembering that through close cooperation with the Central Institute for Research, Design and Guidance in Construction, the design institutes of the ministries responsible for the investment projects

and the producers of materials we have succeeded in obtaining lighter and more supple structures and building materials that can be erected in shorter periods of time. Among the examples that I can give are: work areas with directed lighting built into the roof for light industry, climate control centers for spinning mills and textile factories in the chemical and light industries, pig raising complexes, sugar factories, work areas for the metallurgical industry and the machine building industry and so forth.

[Question] In listing all these successes in the area of technical progress, we imagine that you still have some unfinished projects...

[Answer] Without a doubt. Although important, the results obtained did not exhaust the range of existing possibilities. The precious guidance and directives from the secretary general of the party, comrade Nicolae Ceausescu, issued during the Conferences of the Party Central Committee during the first part of this year, constitute a precious guide for us along these lines. We have in mind and are working to introduce new procedures to reduce the use of those materials that are large consumers of energy and to extend the use of secondary materials stemming from the production in diverse industrial branches, placing special emphasis on insulating materials and the introduction of new tools and devices in the production process in construction - insulation and assembly.

[Question] Although the progress made in the mechanization and industrialization of construction is clear, we would ask you, nonetheless, to tell our readers to what degree has there been an increase in the industrialization of projects and the mechanization of the main construction processes?

[Answer] I want to point out that industrialization in the construction industry, from our ministry's point of view, means the transformation of the largest possible number of operations at the work site, in the workshops in the production bases and in the industry itself, while the operations that remain to be carried out at the work sites are to be done with much reduced levels of physical effort. To this end, we have organized production bases in all the regions of the country, especially at the large industrial complexes, in which we have produced prefabricated materials from concrete, reinforced concrete and preformed concrete using simple and efficient technologies that ensure the quality of the products. Similarly, we have organized concrete supply centers that have mechanized storage facilities for aggregate and cement, and, recently, for waste ash from thermal power plants. For installation and insulation projects, we have prefabrication workshops for installation sub-assemblies, insulation shells for pipes, tinworking projects, paint shops and others.

With regards to mechanization, progress has been made on earthworks projects (approximately 96 percent is complex mechanization), concrete work (over 97 percent complex mechanization) and on finishing work, where the level of mechanization was doubled compared to the first year of the five year plan. It should also be mentioned that progress was made in introducing concrete pumping and powered mixers.

[Question] How do you evaluate the level of development in the use of prefabricated materials?

[Answer] The level of concrete prefabrication reached 27 percent while in installation work it reached 30 percent, which constitutes a good level but one which we must develop. In the prefabrication of concrete, we have pursued and are continuing to pursue a substantial reduction in the types of prefabrication items and a standardization of the weights of these elements in order to permit the efficient use of lifting and assembly equipment, as well as manual labor, a reduction in size discrepancies and assurances of the quality of the concrete from a point of view of both mechanical resistance and, where necessary, its impermeability and, eventually, other characteristics required by the nature of the construction project.

[Question] One of the major characteristics on the current five year plan is increasing the efficiency of economic-social activities. Knowing that there are still large reserves in this area of increasing efficiency, we ask that you refer to the results obtained in reducing material production costs and increasing economic efficiency in construction.

[Answer] We feel that during the current five year plan there has also been success in this important area, eliminating inappropriate situations where some trusts are operating with losses because they are exceeding production expenditures. Compared to the losses in the last year of the previous five year plan and the first year of the current five year plan, as a result of the measures taken at the unit level, beginning with 1977, our ministry has begun to make a profit, and in 1978-1979 it gave to the state an important amount of profits. Similarly, in 1980 we are making substantial profits.

[Question] Statistically, what was the evolution of costs per 1,000 lei of production in construction and assembly?

[Answer] Compared to 1975, this year we had a reduction, in fact, a savings, of 123.5 lei.

[Question] Your ministry is a large consumer of materials: cement, reinforced concrete, wood and so forth. What has been done and what results have been obtained in reducing the specific rate of consumption of construction materials, as well as in promoting new, cheaper and lighter materials and replacements for metals?

[Answer] Our ministry has had a firm policy for the continuing reduction of consumption. Along this line, I should mention the elaboration of new solutions for thermal insulation problems, rejecting the use of polystyrene and mineral fibers. We have experimented with bituminous replacement products of the Pahizol type, we have expanded the use of ashes from thermal power plants, as an additive in making concrete and we have promoted the use in production of construction materials of textile wastes and light mineral aggregates, as well as other local resources.

As a result of the measures taken, this year the consumption of cement and steel reinforcing rods decreased by 1.52 and 2.43 tons, respectively, per one million lei of production in construction and assembly. For lumber, consumption fell to a level of .89 cubic meters per one million lei of production in construction and assembly.

Despite all these results, I must stress that we still have much to do to strengthen order and discipline at the work sites, to eliminate waste and to establish a strict system of conservation and good management of materials at every job site.

[Question] In a future issue, we will have a discussion of the tasks of the industrial construction sector in the coming five year plan.

[29 Dec 80, pp 1, 3]

[Text] In a previous issue, we published the first part of a discussion with comrade Dumitru Popa, minister of industrial construction. In this issue, we present the second part of that discussion.

[Question] We propose moving on to the future. What can you tell us about the investment-construction program in the 1981-1985 five year plan?

[Answer] What I can tell you is that the future is nothing less than very bright and the tasks are especially mobilizing. As is known, the 12th Party Congress approved the achievement of a large volume of investments during the coming five year plan that will exceed the volume of all the investments during the period 1950-1975. Without a doubt, our ministry, which will continue to be one of the principal builders of industrial projects, will have important tasks in achieving this program.

With regards to the directions in which our activity will be carried out, they will be based upon the guidelines and directives issued by comrade secretary general Nicolae Ceausescu at the conferences held with the specialists in this field during the first part of this year, and for whose implementation our ministry took appropriate measures. Moreover, a part of the techniques and high technologies that were achieved this year, and about which I have spoken, are the result of applying the measures to which I have referred. Sizeable results are expected during the coming five year plan. Our ministry has initiated and introduced into the plan for scientific research, technological development and the introduction of technical progress for the period 1981-1985, research themes whose application will lead to savings of approximately 6,400 tons of conventional fuels, 16,000 MWH of electricity, 6,000 tons of metals and so forth during the next five year plan. Similarly, research themes were introduced regarding the production of new systems of machinery and devices for foundation works and earthworks which will contribute to reducing the amount of manual labor needed at the work sites.

Similarly, we will make substantial progress in the next five year plan in the area of the quality of construction, installation and assembly. The main idea is to design and adopt solutions that will allow us to complete projects only of the appropriate quality, using, certainly, equipment and devices that are adequate for ensuring self-inspection throughout the entire period of work.

[Question] What can you tell us regarding the 1981 plan? What are the main problems that will face your ministry?

[Answer] As a result of the directives of the party and state leadership, we will concentrate our efforts on finishing and putting into operation those production facilities that are already under construction. From this point of view, our ministry's 1981 plan presents some particular problems that make this year's tasks not at all easy.

[Question] What are these difficulties?

[Answer] First of all, there is the fact that the on-going projects, at an advanced stage of work and with a large amount of finishing work to be done, hold about 87 percent of the total amount of the plan. This requires a special effort and high quality activities.

Second, the number of facilities and projects that are to be put into operation in 1981, and that are being followed at the central level, is over 600, including some of special importance for the national economy. Finally, although not part of its responsibilities, the Ministry of Industrial Construction considers as a task of honor its role in building an important number of housing units in 1981 in Gorj, Hunedoara and Ialomita counties.

In conclusion, I would say that the changes that have occurred in the structure of the plan for next year, under conditions of maintaining work on a number of projects approximately equaling the number in 1980, require our ministry to take certain organizational and special technical measures. And, we are committed to do everything to achieve our plan tasks.

[Question] Please, tell us about some of these tasks.

[Answer] First of all, given the large number of projects scheduled for start-up, we will concentrate successively on those projects that have sure conditions, maximally avoiding the dispersal of manpower, materials and production means.

Second, we will have to adapt the structure of personnel to the structure of the projects, that is, to provide the preponderance of the qualified workers and technical-engineering personnel that will be employed at a high level in achieving the plan through the efficient use of the overall contract and bonus system.

Third, we will have to spread the application of efficient and highly effective technologies and to intensify the review of this application in order to avoid the situations in the present where they are not applied across the board even though they are known.

Last, we will have to work to complete providing our units with equipment, tools and devices specific to our work in the 1981 plan, where finishing work predominates, both through our own efforts and through cooperation with the Ministry of the Machine Building Industry. We are trying to provide this right from the first part of 1981.

All this must be achieved under conditions of a special efficiency that will lead to making savings of approximately 120 million lei over the initially planned profits for 1981, by reducing production costs and especially material costs.

[Question] I remember that you said the number of projects and facilities that are to go on-line in the national economy in 1981 is over 600. Please, name some of these that are of special importance for the national economy.

[Answer] In 1981, we are to put into operation new and important production facilities within the framework of the large heavy equipment combines in Iasi and Cluj, the petrochemical complexes at Midia-Navodari, Teleajen and Borzesti, the complex fertilizer combines at Arad and Slobozia, the rolling mills at Bailean, Zalău, Porsani and some large industrial complexes at Zalău, Giurgiu, Drobeta-Turnu Severin, Roman and Caracal, as well as a number of agro-industrial projects for the light industry and the food industry.

[Question] What will you do to eliminate the delays and meet the timeframes outlined in the plan for starting-up these investment projects?

[Answer] We have taken and will take all the measures to concentrate the workforce and technical-material means for the purpose of finishing construction-assembly projects at all the projects that have the conditions that will permit start-up by the end of this year, and we will permanently pursue, in cooperation with the user and with the assistance of the county party organs, the operative solution of all problems influencing the completion of these facilities. Moreover, the new law on investments, recently approved by the Grand National Assembly, creates the appropriate framework for a thorough preparation of investments for the purpose of putting these projects into operation within the planned timeframes, thus avoiding the possibility of tying up financial and material funds. In accordance with the provisions of the new law, the beginning of work on projects will only be carried out after fulfilling all the conditions necessary to completing the project on-time.

Similarly, we are committed to applying in an exemplary manner the directives of the top leadership of not opening any work site unless all the necessary conditions and materials are provided, in order to maximally shorten the building period and the time required to start operations.

[Question] In closing, we would also like you to refer, comrade minister, to another aspect which, after what we encountered at work sites, should be mentioned: How is and how will cooperation with other ministries and central organs work? To what degree do you depend on others?

[Answer] To a great degree. I do not want to diminish our response in any way for our own deficiencies, but we cannot ignore the fact that many shortcomings were produced for us by our users through inappropriate and untimely preparation of investment projects. We are convinced that the new Law on Investments will bring radical improvements in this direction. I am especially speaking of providing building designs, technological equipment and special materials in accordance with the normal technological flow so that it will not be necessary for us to return to the same work site.

At the same time, I stress that under the conditions of 1981, when the provision of the material base is done by the holder of the investment project, an even closer collaboration is necessary with the holder both for directing existing resources to priority projects and for revising certain documentation for the purpose of staying with consumption norms and allocated quotas.

I pointed out that the preponderance of the finishing projects in 1981, as a result of the large number of projects scheduled to be put into operation, requires supplying the construction units with some machinery, tools and devices specific to these types of projects. The achievement of this, and right from the first part of 1981, is possible with a closer cooperation with the units of the Ministry of the Machine Building Industry. Similarly, we are still feeling the lack of certain machine-tools that were long ago placed into the production program of units belonging to the Ministry of the Machine Building Industry, such as: powered fork lifts, motorized loaders, crane-equipped trucks for packaged and palletized loads, augers and special tools for rotary-percussion machinery, and so forth.

In closing, I would like to ensure the readers of ROMANIA LIBERA that the 180,000 builders, assemblers and mechanized equipment operators employed in the units of our ministry, who are aware of their important job, will make every effort to complete under the best conditions the tasks outlined by the party and the secretary general, comrade Nicolae Ceausescu, thus contributing to raising socialist Romania to new levels of progress and well-being.

[Question] We thank you on behalf of our readers and wish you much success.

8724

CSO: 2700

PRINCIPAL TASKS OF MINING INDUSTRY

Bucharest SCINTILIA in Romanian 15 Jan 81 pp 1, 3

[Interview with Virgil Trofin, deputy prime minister of the government and minister of mines, petroleum and geology, by Ion Teodor]

[Text] [Question] The extractive industry is the chief producer of energy resources and mineral raw materials essential to all the other sectors of the national economy. For that reason, although we intend to take up the problems of production in 1981, the first year of the five-year plan of quality and effectiveness, we cannot overlook the results obtained last year and in the recently concluded five-year plan. What can you tell us about them?

[Answer] To be sure the workers in the extractive industry had heavy tasks in the 1976-1980 period. In performing these tasks the mining, petroleum and geology units and our ministry enjoyed the constant guidance and help of the party and state administrations and of Nicolae Ceausescu in person. We also point out on this occasion the profoundly scientific character of the policy of developing the reserve of raw materials and fuels, since the party administration foresaw the world energy crisis that broke out in 1973. And so, along with the measures taken throughout the economy on behalf of rational use of petroleum and natural gases, we received considerable investment funds to develop our own material base, to procure highly productive equipment, and to improve the working conditions of the miners, oil workers and other workers in the ministry's units.

In the last 5 years 71 billion lei of state funds were invested in the extractive industry, and 175 new production capacities were activated in the sectors for coal, crude oil, and metallic and nonmetallic ores. In view of Romania's natural resources, special emphasis was placed on obtaining greater quantities of inferior fuels, and their output was up 37 percent from 1975 last year. Outputs of the other raw materials were also increased throughout the five-year plan, namely copper in concentrates, bauxite, graphite, kaolin, feldspar, chalk, dolomite, refractory clay, quartz sand, limestone and salt.

Analyzed in evolution, the results are good. I should like to point out here the good results obtained by the miners collectives in Valea Jiului, Anina, Motru, the Suceava basin and Comanesti, the units belonging to the Raia Mare and Deva mining centrals and the Cluj Mining Combine, and the oil workers at Moinesti. Yet the plan provisions for 1980 were not fulfilled for some basic products. For example the plan

for lignite was unfulfilled by more than 17 million tons. The plan was not entirely fulfilled in the Oltenia coal basin, although last year's output was 2.2 million tons greater than in 1979. In the petroleum and gases sector special efforts were made and major above-plan quantities of natural gases and gasoline were obtained, but the plan for crude oil was unfulfilled.

[Question] In view of this situation, what are the main tasks of the workers in the extractive sector in 1981 and what steps are being taken to fulfill them?

[Answer] In pursuance of the provisions and directives of the 12th Party Congress, the plan for this year is primarily characterized by major increases in physical production over last year's outputs: by 44.6 percent in fine coal, including 9.7 percent in soft coal and 55 percent in lignite and brown coal, by 9.2 percent in crude oil, by 5 percent in methane gas, by 10.4 percent in electrolytic copper, by 13.9 percent in lead, by 2.3 percent in limestone, by 21.6 percent in pyrites, etc.

The 1981 plan is clearly distinguished by qualitatively superior elements. Taking all the results in 1980 as a basis of comparison, it is planned to raise the value of the net output by 4.2 percent, exceeding the increase specified for the gross output, while labor productivity, computed on the basis of the value of the net output, is up 6.3 percent. The plan tasks were broken down and promptly transmitted to the units. The general assemblies that analyzed and discussed the plan indicators determined specific measures on the levels of the ministry, centrals, enterprises and sections for exemplary fulfillment of the production tasks. Programs were also drafted according to products.

When the 1981 plan indicators were discussed, the ministry's management council instituted a number of measures with definite responsibilities and time limits. Some of the most important measures are improvement of the quality of the extracted raw coal to enhance productivity in washing and to produce it regularly for coke and semicoke; accelerated rates of advance at working faces and achievement of physical labor productivity in the coal enterprises; more intensive use of the main underground equipment and that in the surface pits; complete use of the reserve of oil wells in production; and a 10 percent increase in the number of geological-technological operations to augment the flow of crude oil into wells. To carry out the crude-oil production plan, it has been further provided to raise the coefficient of exploitation of the wells, to shorten the time of activating the wells with completed drilling, to form new brigades for activating the wells, capital repairs and emergencies by re-assigning the indirectly productive workers, to increase the operating speeds in drilling wells, etc.

Application of the provisions of the decree of the State Council to encourage personnel in the extractive industry who exceed the planned output in extraction of crude oil, coal and other raw materials is very important to fulfillment of the plan tasks in our sector of activity. The measure is based on the suggestion and personnel direction of Party Secretary General Nicolae Ceausescu. The fact is especially important that these bonuses are granted as an additional incentive above all the other benefits provided by law for implementing and exceeding the planned physical production. This means that a worker who exceeds his plan tasks for which he receives the benefits due on piecework (and progressive piecework in the mining industry) will receive special bonuses in addition to these benefits that amount to as much as 15 percent of the value of the above-plan products.

Question How do you rate the measures taken by the party administration to update and improve the correlation, on economic principles, of the prices for production and delivery of the products to the socialist units, and how will these measures affect the efficiency of the extractive industry?

Answer The recent law passed by the Grand National Assembly, which was drafted under the direction and guidance of Nicolae Ceausescu and according to the policies he set, allows for the changes that have taken place in production costs, especially in the extractive industry, and the higher prices at which we import a number of basic raw materials and materials. As we know, the rise in costs in the extractive industry was caused primarily by the exploitation of some deposits with a poorer content of useful mineral substances and more difficult operating conditions. Updating the prices for delivery of the basic products from our units to the socialist units correlates those prices with the production costs and provides for the profitability of the sector and a better distribution of the profit between the extractive industry and the consumers or processors of raw materials and fuels. Once the new prices were in effect, the ministry's management council took steps for better management of the production means, elimination of waste, and better organized production and labor in order to cut the costs as far as possible. We are determined to take firm action, as requested by the party administration, to enhance economic effectiveness, to apply the principles of the new economic-financial mechanism properly and consistently, and to consolidate self-administration and worker self-management in the units of the extractive industry.

Question Will these measures avoid situations in the future like that in the Oltenia coal basin, where over 2 million tons of extracted lignite remained in store instead of being delivered to the thermoelectric power stations?

Answer Definitely yes. The party administration's measures to eliminate the stockpiles of coal created above the norms proved highly important to improvement of productive activity in the Oltenia basin. This is not the time to analyze the causes of the formation of those stockpiles. They were due to the intensive development of coal extraction in that basin and also to the lag in organization of transportation and reception of the lignite by the thermoelectric power stations. Elimination of the previous deficiencies was emphasized by the Oltenia Mining Combine, the thermoelectric power stations, the transport units, and the competent ministries. Since the start of this effort, over 900,000 tons of lignite have been delivered from the stockpiles.

I think correct application of the principles of self-administration and worker self-management will preclude any repetition of these defects and help to improve the performance of our ministry's units. I refer especially to better use and maintenance of the machines, equipment and installations, elimination of accidental interruptions for repairs, and improved supply of spare parts. We cannot overlook the fact that the use index of the reserve of available time of the rotor excavators tended to increase last year, but it was finally only about 60 percent. There are also great differences in the indices of extensive and intensive use from one pit to another, proving that we must make a greater effort to determine and generalize advanced experience. As a matter of fact the use index of the reserve of available time of the rotor excavators is planned to average 75 percent this year.

Question Are there also problems to be solved by enterprises under other ministries? How does this collaboration operate?

Answer After Nicolae Ceausescu's visits to the Oltenia coal basin and Valea Jiului, a broad program of mechanized coal and ore extraction was instituted, with obligations set for both the mining units and the machine building enterprises. Implementation of this program is checked by a command composed of management personnel and specialists from both our ministry and the Ministry of the Machine Building Industry. Actually equipment highly important to the mining and petroleum industries has been assimilated in manufacture in recent years, namely new types of complexes and combines for working faces, cutting combines, boring installations, rotor excavators, dumping machines, high-capacity bucket excavators, heavy dump trucks, high-capacity ore mills, drilling installations for great depths, etc.

Despite these good results, there have also been some defects and difficulties in this field due to the delays with which the machine building units began assimilation and manufacture of some new equipment specified in the equipment and mechanization programs for 1978-1980. There are lags behind the provisions of these programs in starting manufacture and delivering such important equipment as combines for cutting in gangue, high-pressure hydraulic units, machines for digging channels in pits, axial mine fans for general ventilation, 30-35 ton structural drilling installations, installations and tools for drilling and extraction, etc. Better collaboration with these units and those of the chemical industry for procurement of rubber products, reagents and chemicals in the needed quantities and quality will permit better results from our units' activity.

Question In the extractive industry increased production also depends on the volume of known and exploited mineral reserves. Last year there was a working conference in the RCP Central Committee with the activists in the field of geology. What steps were taken to enlarge the domestic reserve of raw materials?

Answer According to the party administration's directions, development of the domestic reserve of mineral raw materials and energy resources has been and still is the main effort of geologic research. In the 1976-1980 period, geologic research projects to increase the coal reserves were implemented throughout Romania, both in the areas of existing deposits and in new areas like Cojmanesti, Urdari, Rosiuta II, Amara-Tirila-Cernisoara, Schitu Golesti et al. To expand the domestic reserve of mineral raw materials, programs were drafted for scientific study of the alluvial sands bearing titanium and zirconium and some deposits of iron, titanium, vanadium etc. New technologies were also studied for complete exploitation of the deposit's poorer in useful mineral substances. The preliminary data indicate that in the recently concluded five-year plan geologic research will show a favorable balance, since the provisions are fulfilled in the main technical-economic indicators and in that of identifying and outlining the new volumes of planned reserves except for petroleum. On this basis, the 1981 geologic research program, drafted according to the directions and objectives set by Nicolae Ceausescu, is characterized by intensified and enhanced research activity to accelerate discovery of new reserves of petroleum, natural gases, coals, geothermal waters, combustible shales, ferrous and nonferrous ores, etc. Substantiation of the tasks for increasing the reserves included the structures, areas and features of every deposit, since the value of the operations to be performed is 8 percent higher than last year. In the petroleum sector increases in the reserves are planned that are about 65 percent greater than the expected results for 1980, with emphasis upon the areas with difficult morphology and complicated geology, while it is planned to complete the outlining and determine the potential of reserves of petroleum and gas deposits on the Romanian continental plateau of the Black Sea. Special emphasis will be placed on intensified geologic studies of capacities to be activated in the current period.

The extractive industry employs a powerful corps of miners, oil workers and geologists, deeply devoted to the party and state policy, who appreciate the party's constant concern and efforts on behalf of their living and working conditions and are making every effort to perform their tasks honorably. The first results obtained in 1981, better than those of last year, confirm their resolve to do all they can to provide the mineral raw materials and fuels essential to the further development of the national economy this year and in the five-year plan as far as possible out of domestic resources.

\$186
CSO: 2700

BRIEFS

REDUCED SUGAR PRODUCTION--The processing of sugar beets from the 1980 harvest is completed except for the factory in Cuprija where it is drawing to a close. According to Radovan Bakoc, director general of the "Jugosecer" business community, 670,000 tons of sugar were produced from about 5 million tons of sugar beets. The early estimates that 720,000 tons of sugar would be produced were excessively optimistic. The weather last year contributed to lower yields and poorer quality of sugar beets. Sugar mill capacities were not fully used, especially after the middle of November. Sugar needs up to the next harvest are in the process of being worked out. Sugar supply problems have arisen again in some areas of the country. [Excerpts] [Belgrade BORBA in Serbo-Croatian 11 Feb 81 p 14]

SPRING PLANTING--At its meeting on 12 February the Federal Executive Council adopted the spring planting plan which calls for planting a total of 4,543,000 hectares or about 8 percent more than in 1980. Most of the area would be planted in corn (about 2,347,000 hectares, or 6.5 percent more than last year). Sugar beets would be planted on 180,475 hectares, or 50,000 hectares (38.8 percent) more than last year; sunflowers on 277,174 hectares, or 53 percent more; soybeans on 62,829 hectares or three times more than last year. This is expected to yield 609,000 tons of sunflowers, 125,000 tons of soybeans, and 77,000 tons of rape, from which 304,000 tons of oil could be produced to fully meet the edible oil needs of the domestic market. Vegetables will be planted on 672,000 hectares, or 4 percent more than last year, spring grains on 381,000 hectares, fodder crops of 539,000 hectares, and other crops on about 19,000 hectares. [Excerpt] [Belgrade BORBA in Serbo-Croatian 13 Feb 81 p 14]

MONTENEGRIN PLANTING PLAN--The 1980 fall planting plan for Montenegro was 80 percent met. Considering the weather and other problems, it is thought that the plan can be considered successful. All areas left unplanted last fall, however, should be included in this spring's program, which calls for planting 38,500 hectares (1,800 hectares in the socialized sector and 36,700 hectares in the private sector); this will include 17,500 hectares in grain, 14,000 in vegetables, 700 in industrial crops, and 6,300 hectares in fodder crops. [Excerpt] [Belgrade PRIVREDNI PREGLED in Serbo-Croatian 17 Feb 81 p 1]

CROATIAN OIL GAS NEEDS--Last year Croatia consumed 148,000 tons of liquid oil gas, which was about 10 percent less than it needed. The insufficient coal supplies in Croatia have increased liquid oil gas needs, which will be even greater this year. In addition, four new industrial facilities based on gas will go into

operation this year, for which an additional 10,950 tons will be needed. Thus, total needs this year will be 173,750 tons, assuming a 17.3-percent increase in consumption over last year. This year's allocation for Croatia is 140,000 tons of oil gas, which is less than last year, so the republic will lack 33,750 tons. [Excerpt] [Belgrade PRIVREDNI PREGLED in Serbo-Croatian 17 Feb 81 p 1]

VOJVODINA FARMER PENSIONS--At today's meeting of the province's three Assembly chambers the law on farmers pensions was amended, lowering the pension age for men from 70 to 65 years and for women from 65 to 60 and increasing the basic pension from 400 to 800 dinars; the variable portion of pension incomes would be brought into accord with the movement of prices for basic agricultural products. In this way a farmer who has 10 hectares of average-quality land can have a pension of about 10,000 dinars. Before the law was changed, the average farm pension amounted to 1,360 dinars (the lowest being 825 and the highest 5,329 dinars). There are about 80,000 old-age farm pensioners in Vojvodina who own about 300,000 hectares of arable land. About 2,000 have a pension based on a contract with associated work, while about 1,600 gave up their land for a regular monthly income. [Text] [Belgrade BORBA in Serbo-Croatian 14 Feb 81 p 4]

PLANTING IN SLOVENIA--According to the spring planting plan for Slovenia, priority will be given to corn and sugar beets. A total of 189,879 hectares will be planted, or 10,000 hectares more than last year, reflecting the attempt by farmers to plant all the areas which were left unplanted last fall. Sugar beets will be planted on 6,875 hectares (last year 3,123 hectares were planted). Almost every year Slovenia has increased its hectareage in corn at the expense of potatoes. This year corn will be planted on 64,000 hectares, compared to 57,616 hectares in 1980. The area to be planted in silage corn will also increase from 15,899 hectares last year to 17,000 hectares this year. The area in potatoes will be reduced from 35,931 to 33,000 hectares. But the reduced hectareage is expected to be made up in higher yields so that sufficient quantities of potatoes will be available. The areas in fodder crops will be increased to 52,000 hectares, most of which (as also in the case of corn) will be in the private sector. Vegetables will be planted on 10,000 hectares compared to 9,726 hectares last year. The socialized sector accounts for only 26,275 hectares of Slovenia's total 255,929 hectares (the private sector, 227,654 hectares). [Excerpt] [Belgrade PRIVREDNI PREGLED in Serbo-Croatian 19 Feb 81 p 4]

PORTS OF RIJEKA AREA--Last year almost 21 million tons of cargo of all kinds were handled in the ports of the Rijeka area. The new petroleum port in Omisalj on the island of Krk built for use by the Yugoslav pipeline appears to have contributed considerably to this increase. It handled about 13.5 million tons of liquid cargo last year. Our own ships transported more than 4 million tons to and from these ports last year, although this was an increase of only 1 percent over 1979. The largest Yugoslav commercial shipping firm, "Jugolinija," accounted for one-third of the 300 million dinars earned in net foreign exchange from shipping last year. [Excerpt] [Belgrade PRIVREDNI PREGLED in Serbo-Croatian 20 Feb 81 p 3]

END OF

FICHE

DATE FILMED

13 MARCH 1981